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Retrieval Procedures For Hydrologic Data From ARS Experimental Watersheds in the United States

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By
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PREFACE

This publication describes the scope and use of **RE**trieval **P**rocedures for **H**ydro**L**ogic Data from ARS **EX**perimental Watersheds (**REPHLEX**). The **REPHLEX** system consists of several interactive computer procedures developed to gain access to the ARS Water Data Bank. The data stored in the bank were collected by various groups and individuals within and without ARS for specific research projects that are in progress or have been completed. These data can be used for many other purposes. In an effort to provide research scientists and engineers with consistently high quality data from its centralized bank, the Water Data Laboratory has developed **REPHLEX** procedures to decrease the turn-around time and interaction necessary to gather data sets that might pertain to a specific research project.

This publication is intended to serve as a training manual and reference guide to retrieve, condense, and reformat precipitation and runoff files stored in the ARS Water Data Bank in order to produce data sets that research scientists can analyze and evaluate in terms of their needs.

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EXHIBITS

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REtrieval Procedures for **H**ydro**L**ogic Data
From ARS **EX**perimental Watersheds
in the United States (**REPHLEX**)

by J. L. Thurman, R. T. Roberts, and J. B. Burford[1/]

Hydrologic research programs have been of primary concern in the U.S. Department of Agriculture (USDA) since they were initiated during the late 1920's and early 1930's. Programs started by the Soil Conservation Service (formerly the Soil Erosion Service) were transferred to the Agricultural Research Service (ARS) during the early 1950's. Research activities have been continuous at some locations since the early 1930's. Studies have been made on more than 600 watersheds.

In 1956, publication of annual summaries of hydrologic data from the experimental watersheds was started as a cooperative effort involving several ARS Watershed Research Centers. Personnel in Beltsville, Md., assembled, reviewed, and published these summaries. The Water Data Laboratory (WDL), formerly the Hydrologic Data Laboratory, was established in 1969 with a mission that included the development of a storage and retrieval system for hydrologic data from the ARS Watershed Research Centers in addition to publication compilation.

Hydrologic data are stored in the ARS Water Data Bank in sufficient detail to produce continuous hyetographs, hydrographs, and accumulation graphs for individual storms. Daily, monthly, and annual accumulations can be derived or extracted from the data. The USDA Washington Computer Center (WCC) facilities are used by the WDL through remote and interactive terminals.

Procedures were developed for making oral and written requests to the WDL for copies of the data stored in the ARS Water Data Bank. Water Data Laboratory personnel, working with interactive terminals, submit computer instructions to search out and transfer the requested data to transportable media. If copies of the data are requested on magnetic tape, user tapes are sent to the WCC by the WDL. The data are copied and the user tapes are then returned to the WDL for mailing to the requester. The cycle is normally completed within 4 to 5 days, but uncontrollable circumstances may result in undesirable delays. Advantages of the procedure are that working relationships between the data users and the WCC (fund exchange arrangements) are not required and that all necessary computer expertise is provided by the WDL.

Increased computer-related capabilities in general but particularly within the USDA, the apparent increased interest in water

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1/ Computer specialists and hydrologist, respectively, Water Data Laboratory, Plant Physiology Institute, Beltsville Agricultural Research Center, Beltsville, Md. 20705.

management, and the expanding awareness of the existence of the ARS Water Data Bank have encouraged the WDL to decrease the time lag in responding to data requests. Accordingly, the WDL has developed "**RE**trieval **P**rocedures for **H**ydro**L**ogic Data from ARS **EX**perimental Watersheds" (**REPHLEX**) so that users of ARS water data may gain access to the ARS Water Data Bank interactively. **REPHLEX** procedures have been designed to be self-prompting to promote usability with minimum training in computer techniques and the internal mechanics of the ARS Water Data Bank. It is recommended that the user of these procedures review the general information in Chapters 2 and 3 in detail before referring to Chapter 4, which describes individual procedures.

1. ARS WATER DATA BANK

General Description

The ARS Water Data Bank contains precipitation and runoff data collected from about 305 individual study areas operated by 11 ARS Watershed Research Centers. The watersheds range from less than 0.2 ha (0.5 acre) to over 536 square km (207 square miles). Rain gage networks have from 1 to more than 200 recording stations per watershed. Length of records for individual stations varies from 1 to 45 years.

Most of the data obtained from the Watershed Research Centers are currently being processed and handled by computer. Hydrologic data collected to support specific studies at the several Watershed Research Centers are converted to computer-compatible media, copied, and sent to the WDL after a reasonable lag time. Data collected prior to the advent of computer processing have been converted from tabular or analog form to computer-accessible media by the Research Centers or the WDL. The WDL has an ongoing program to recapture and convert to computer-accessible media potentially useful data from historical files. All data are reviewed, manipulated into standard formats, checked for integrity, and stored on magnetic tapes at the Washington Computer Center.

The ARS Water Data Bank is organized by station year of data, which is used in this publication to indicate a calendar year of either precipitation or runoff data from a specific recording station. Most of the data stored in the ARS Water Data Bank are in breakpoint form, i.e., an instantaneous rate (for runoff) or accumulation (for precipitation) recorded with an associated time. Raw breakpoint data are processed to provide elemental hydrologic information, such as accumulations, intensities, and volumes. Identification, applicable information codes, and calculated accumulation values are added to create a processed record (see exhibits 1 and 2, pp. 16 and 17). The processed breakpoint data are stored in sequential files as one breakpoint record per logical computer record. Each station year of data is stored as a cataloged data set on magnetic tape. There are, as of December 1982, over 11,000 such data sets, 7,000 and 4,000 station years of precipitation and runoff data, respectively, stored in the ARS Water Data Bank. These files are referred to as storage and retrieval (S&R) files.

In addition to the breakpoint data stored in the ARS Water Data Bank, there are a limited number of stations where only daily accumulation values are available. These data are noted in the "Summary of the ARS Water Data Bank" (Appendix B) and can be retrieved only by the procedures **DPQRY** and **DQQRY** (see Chapter 4, pp. 20 and 24).

Precipitation and runoff records are considered basic for most hydrologic research and are usually obtained continuously. Information is collected as needed for each study on temperature, evaporation, wind movement, soil moisture, water quality, land use, and cover conditions, together with topographic and geologic information. Some of this descriptive and environmental information, such as temperature, cover conditions, land use, and soils, is included in a series of hydrologic publications[2/] and is obtainable from the WDL. The WDL also maintains an index of other water-related data collected by the Watershed Research Centers and other research organizations. For copies of the publications and information concerning other water-related data contact--

Water Data Laboratory
Rm. 236, Bldg. 007, BARC-W
Beltsville, Md. 20705
(Phone: FTS 344-3550, COMM. 301-344-3550)

Data Security

The development, maintenance, and retrieval of large volumes of data, as in the ARS Water Data Bank, would be cost-prohibitive without the use of magnetic-tape storage. However, magnetic tape is vulnerable to edgewear of the plastic film, uncontrolled environment, such as high temperature and humidity, and stray magnetic fields. The files must also be protected from accidental operator or user error. Special precautions have been taken to maintain information integrity of the ARS Water Data Bank.

Accidental user errors are eliminated by restricting accessibility. **REPHLEX** procedures are designed to be "read only." The primary principle of this system is to copy data from the ARS Water Data Bank to "user files," which can be manipulated by the user. The S&R files are read only by previously tested procedures.

The data bank files are kept in the WCC tape-storage facilities, where a controlled environment is maintained. In addition to the S&R files, which are accessible via **REPHLEX** procedures, the WDL maintains at least two more copies of the data on magnetic tape. The WDL has also developed techniques using 16-mm Computer Output Microfilm as a medium for archival copies of the data. These microfilm images, arranged in 'CINE' mode

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2/ Burford, J. B., J. L. Thurman, and R. T. Roberts. Hydrologic data for experimental agricultural watersheds in the United States, 1973. U.S. Dept. Agr. Misc. Pub. 1420, 404 pp. 1982. Also 16 earlier volumes (see MP 1420, p. 2).

format with 50 records per frame, can be used with Computer Input Microfilm techniques to recreate magnetic tape files.[3/] The microfilm is stored in WDL fireproof facilities.

3/ Burford, J. B., and J. M. Clark. Computer input microfilm (CIM) feasibility study. U.S. Dept. Agr. ARS-NE-46, 6 pp. 1974.

Obtaining Authorization to Use the WCC Computer System

Access to **REPHLEX** procedures to retrieve data from the ARS Water Data Bank is available to anyone with access to the WCC computer system. The WCC maintains an IBM 370/3033/3042 Attached Processor system with an IBM 370/4341 as an auxiliary system. All processors run under the MVS operating system with the JES2 job entry subsystem and time-share option (TSO). Access to the system may be through interactive time-share terminals in asynchronous mode at line speeds from 110 to 1200 bits per second (BPS) or through remote job entry (RJE) terminals in synchronous mode at line speeds of 2400 or 4800 BPS for dial-up lines. Most teletype-compatible and Remote 3270-compatible terminals can be used to gain access to the WCC system.

A reimbursable arrangement between the WCC and user to permit the exchange of funds to cover computer use costs can be made by contacting--

Resource Management Staff
USDA-Washington Computer Center
Rm. S-159, South Building
12th and Independence Avenue, SW.
Washington, DC 20280
(Phone: 202-447-7975)

Currently WCC restricts the establishment of reimbursable agreements to government agencies. After arranging for a reimbursable agreement with the WCC, users should contact their security officers to obtain logon identification ("userids"), passwords, and a remote number for batch processing. The Resource Management Staff can provide contacts for the appropriate security officer. ARS organizations should contact--

Agency Security Officer
Communications and Data Services Division
Rm. 003, NAL
Beltsville, MD 20705
(Phone: 301-344-2869)

Establishing Communications

The process for establishing data communications with the WCC is described in detail in the "WCC User's Handbook" (available from the WCC User Service). For most teletype-compatible terminals, the users should dial a valid telephone number at the WCC. The telephone will answer with a high-pitched tone indicating that the communications front-end processor is available. The users then switch from voice to data mode according to the type modem being used (e.g., the phone is placed in an accoustical coupler or the **DATA** button is pressed on telephone

company data sets). When communications are established, the users should identify themselves to the system by pressing the **RETURN** key on their terminal and entering the following command:

LOGON userid

The system will respond by asking for a password. After the password is entered, the system will list any general messages. The terminal is then ready for data requests.

Initiating **REPHLEX** Procedures

REPHLEX procedures are self-prompting, with step-by-step instructions displayed on an interactive time-share terminal for the data requester. All the procedures are initiated by entering the command--

```
EXEC 'SEANZWD.CLIB(xxxxx)'
```

where xxxxx is the procedure name. The user will then be prompted for required information. Although some procedures have special key words to terminate a session, pressing the **BREAK** key (**ATTENTION** key on some terminals) will always end a procedure. **REPHLEX** prompts are intended to be self-explanatory wherever possible. At the same time, lengthy prompts are slow, awkward, and expensive. In order to keep prompts as short as possible, some words and phrases are abbreviated. All abbreviations will be obvious or will have been previously used in an unabbreviated form.

Job Priority

Several of the **REPHLEX** procedures generate batch jobs, which are released to the operating system for execution according to the WCC's queuing system. The execution of these batch jobs can be accelerated by raising the job priority at an additional cost to the data requester. In order to minimize costs, the priority parameter can be set to deferred processing. The priority for "normal" turn-around at the WCC is 3. The following table shows valid priorities at the WCC and their effect on cost and turn-around time:

Job priority	Service requested	Rate differential	Typical turn-around time
13	High priority	3.00	0.5 hour
3	Normal processing	1.00	4 hours
2	Deferred overnight	.75	Overnight

Routing SYSOUT Files

REPHLEX procedures that generate batch jobs always request a destination for the printed output. For users with access to an RJE terminal with a printer, the response to the prompt should be their remote number (as assigned by the Agency Security Officer) in the form RMTxx, where xx is the remote number. For users without access to an RJE terminal, the response to this prompt will be LOCAL, which will cause the printed output to be routed to a printer at the WCC. Arrangements can be made with the WCC User Service for pickup or delivery of these listings.

For the data requester with access only to an interactive time-share terminal, the WDL has provided another alternative. Some procedures prompt for MSGCLASS. The default for this prompt is always A, which directs the printed output to a line printer.

The data requester may respond to this prompt by entering Q or T, which will cause the printed output to be held on a special SYSOUT queue. The data requesters can retrieve this output via their interactive terminals by entering the command--

```
LISTJES jobname
     or
OUTPUT jobname
```

The LISTJES command has several subcommands, which can be used to retrieve all or part of the output. Some of these include--

```
FF - File forward; move from one SYSOUT file to
   the next.
PFxxx - Page forward specified number of pages.
PBxxx - Page backward specified number of pages.
QUIT  - End session.
FIND /xxx/ - Find a specified string.
   - Pressing RETURN key displays next 40 records of
   the current SYSOUT file at the terminal.
RELEASE DEST(RMTxx) - Release SYSOUT file to remote
   number xx.  Other SYSOUT files for the job will
   remain on the spool.
```

In order to remove output from the queue, the user can enter--

```
OUTPUT jobname DELETE
```

which will remove the job from the system, or

```
OUTPUT jobname DEST(RMTxx)
```

which will route the job to the remote specified.

For a more complete description of the LISTJES and OUTPUT commands, refer to the "TSO/SUPERSET Utilities" and the "WCC User's Handbook," respectively. To obtain these manuals, contact the WCC User Service.

Disk and Magnetic Tape Files

Several **REPHLEX** procedures prompt for input or output data set names for disk or magnetic tape files. Each prompt contains the phrase "fully qualified." This refers to TSO naming conventions, which require that all data sets conform to the following format:

```
Userid.user-supplied-name.descriptive-qualifier
```

The combination of the operator's "userid" and a "user-supplied-name" results in a fully qualified data set name. A "descriptive-qualifier," such as DATA, CNTL, TEXT, may be added

to the name, but it is not necessary. For a more complete explanation of the WCC data set naming conventions, refer to the "WCC User's Handbook."

Magnetic tape files generated by **REPHLEX** procedures are standard-label, 9-track, and 6250 bits per inch (BPI). Record lengths and blocksizes are described for each procedure. Disk files are stored on resident 3350 disk files.

Identification Codes

ARS watershed areas have been assigned location numbers from 1 to 77. Within specific locations, individual watersheds have been assigned three-digit numbers by the Research Centers. A combination of the two numbers results in a five-digit watershed identification. For a cross-reference of the WDL watershed identification numbers and local identification codes, refer to Appendix A.

REPHLEX procedures may prompt for location and watershed number separately or as one unit. Location numbers must be entered as a two-digit number. Thus Vero Beach, Fla., must be entered as 08 rather than 8. Individual watershed numbers must be entered as zero-filled three-digit numbers when requested by a **REPHLEX** procedure. For example, watershed W-2 at Vero Beach has been assigned watershed number 002. When a watershed identification is requested, a five-digit number must be entered, i.e., 08002 for watershed W-2 at Vero Beach.

Rain gages may be considered as parts of networks or individually. They also may be so situated that they apply to more than one watershed. For this reason the WDL does not attempt to tie a specific rain gage recording station to a specific watershed area. Maps giving locations of most rain gages are available in the USDA Miscellaneous Publication series "Hydrologic Data for Experimental Agricultural Watersheds in the United States."[4/] The WDL rain gage identification is a field of six alphanumeric characters. It consists of the original code used by the Watershed Research Center right-justified in a six-character field (after eliminating any special characters) and zero filled. Thus, a rain gage coded as 75-A on a watershed map will be identified as 00075A. All **REPHLEX** procedures prompting for a rain gage identification will require all six characters.

4/ See footnote 2, p. 4.

Overview of **REPHLEX** Procedures

WDLCOPY is the basic **REPHLEX** procedure used to retrieve data from the ARS Water Data Bank. This procedure copies one or more station years of data to one of three destinations--magnetic tape files, online disk files, or printed listings. Either precipitation or runoff data may be retrieved. The output files are in the WDL standard format.

IDENT provides the data requester with basic information about a watershed, such as location, original identification, acreage, latitude, and longitude. This procedure has no output other than the information returned to the user's terminal. Several generic searches may be made.

DPQRY provides daily totals for precipitation data stored in the ARS Water Data Bank. Multiple rain gages for multiple years of data can be requested. Output can be either printed or copied to magnetic tape. Printed tables provide monthly and annual precipitation amounts as well as daily totals.

DQQRY provides either mean daily discharge rates or runoff volumes. Multiple watersheds for multiple years of data can be requested. Output can be either printed or copied to magnetic tape. Printed tables provide monthly and annual discharge volumes as well as daily totals.

PLOTYR is an interactive graphics program, which plots rainfall hyetographs superimposed over runoff hydrographs for intervals up to 1 month. This routine is useful in selecting storm events. Selected parts of the same timespan can be plotted multiple times. Maximum peak flows are provided at the beginning of each month of data. Rainfall and runoff data must be available in online disk files in the WDL standard format (can be built using the **WDLCOPY** procedure). Plots may be generated either on a graphics screen or on a flatbed plotter using various types of equipment.

SASPLOTP produces printer plots for rainfall hyetographs or accumulation curves. Specific timespans may be specified by the data requester. Multiple plots may be requested for each station year of data.

SASPLOTQ produces printer plots for runoff hydrographs. Specific timespans may be specified by the data requester. Multiple plots may be requested for each station year of data.

SASGRAFP is an interactive graphics program, which plots rainfall hyetographs or accumulation curves for selected time periods. Multiple plots may be generated during one session. Data for this procedure must be available in an online disk file in the WDL standard format (can be built using the **WDLCOPY**

procedure). Specific timespans may be specified by the data requester. Plots may be generated either on a graphics screen or on a flatbed plotter using various types of equipment.

SASGRAFQ is an interactive graphics program, which plots runoff hydrographs for timespans specified by the data requester. Multiple plots may be generated during one session. Data for this procedure must be available in an online disk file in the WDL standard format (can be built using the **WDLCOPY** procedure). Plots may be generated either on a graphics screen or on a flatbed plotter using various types of equipment.

SPRDSHT provides updated versions of the "Summary of the ARS Water Data Bank" (see Appendix B). The data requester may specify one or more locations to be printed.

NEWS provides a user of **REPHLEX** procedures with information pertaining to changes and additions to the system.

Cost Summary

Data requesters will be billed via their reimbursable agreements with the WCC for the computer costs of running **REPHLEX** procedures. Many variables are associated with these costs, but in general the following guidelines may be used to estimate computer expense:

(1) Copying data using the **WDLCOPY** procedure at priority 3 (normal) costs approximately $3 plus $0.35 per station year.

(2) Running the **IDENT** procedure costs approximately $0.85 per session, which is largely dependent on online TSO time rather than program execution expense and should be interpreted accordingly.

(3) Using **DPQRY** or **DQQRY** procedures at normal priority costs approximately $5.10 per run. Multiple daily tables will increase the minimum by approximtely $0.025 per daily table (station year of data).

(4) Running **PLOTYR** costs approximately $0.50 per plot frame. About 30 seconds are required to create a screen plot and 1.5 minutes to create a pen plot at 1200 BPS. Selecting a storm event from a station year of data will typically require 30 plot frames with no prior knowledge of the data for a total expense of about $15.

(5) Producing a printer plot using **SASPLOTP** or **SASPLOTQ** costs approximately $1.05 per plot at normal priority.

(6) Running **SASGRAFP** or **SASGRAFQ** is approximately $3 per plot frame. About 30 seconds are required to produce a screen plot and 1.5 minutes to produce a pen plot at 1200 BPS.

(7) A complete summary listing using the **SPRDSHT** procedure at normal priority costs about $2.60. The minimum for listing one location is approximately $1.30.

(8) The cost of running **NEWS** will vary depending on the amount of information displayed, but normally it will be insignificant.

Billing rates are changed regularly by the WCC to reflect their expenses. These estimates only reflect conditions at the time they were prepared.

WDLCOPY

This **REPHLEX** procedure copies breakpoint data to any one of three destinations--magnetic tape files, online disk files, or printed listings. Either precipitation or runoff may be retrieved but not simultaneously. Multiple years of data for multiple stations and multiple locations may be copied to one output file. Only one output file will be generated for each session of **WDLCOPY**. Printed output of selected data can be routed to an RJE terminal or held for later retrieval by an interactive terminal. A report is generated for each session summarizing data that have been successfully selected. These reports are held for regeneration at the interactive terminal if MSGCLASS=Q is specified.

WDLCOPY will prompt the data requester for specific information as to which data are desired and where the copy should go. The user will be prompted for jobname, project number, msgclass, and destination of printed output as described in Chapter 3. Three types of output are displayed as options before the user is prompted for an output data type. The user will respond with one of the codes displayed. If the output data type requested is magnetic tape or disk, the user is prompted for an output data set name. This must be a fully qualified name per IBM and WCC standards (see Chapter 3, p. 9).

Following is a sample session of **WDLCOPY**. Operator entries are shown as lowercase letters and **REPHLEX** prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key immediately in response to a prompt will generate a space (null response) as shown in the sample session to repeat a location number. In this sample session, all years of data for watersheds 69030 and 69031 will be copied to a magnetic tape. Note that a null response to the ENDING LOCATION NUMBER prompt causes the location number 69 to be repeated. All inclusive data are copied by this procedure. The years 00 (BEGINNING) to 99 (ENDING) cause all available data for these two watersheds (everything between watersheds 30 and 31) to be copied to the tape file. To prevent costly errors, the **WDLCOPY** procedure will copy a maximum of 150 years in one request.

Output of the **WDLCOPY** procedure is in the standard (S&R) format used at the Water Data Laboratory. The record length for precipitation and runoff files is 60 and 70 characters, respectively. Blocksize for disk and tape files is 4,620 and 12,600 characters, respectively, for both precipitation and runoff. Record layouts are provided in exhibits 1 and 2 for precipitation and runoff.

Sample session

```
exec 'seanzwd.clib(wdlcopy)'
ENTER JOBNAME:
seazcopy
ENTER PRIORITY:
1
ENTER PROJECT NUMBER:
9999999999
ENTER MSGCLASS (DEFAULT=A):

ENTER DESTINATION:
rmt29
ENTER TYPE DATA TO BE COPIED (P=PRECIP, Q=RUNOFF):
q
ENTER OUTPUT DATA TYPE (T=TAPE, D=DISK, P=PRINT):
t
ENTER OUTPUT DSN (FULLY QUALIFIED):
ars41.169.mstrq.part2
ENTER BEGINNING LOCATION NUMBER (2 DIGITS):
69
ENTER BEGINNING WATERSHED NUMBER (3 DIGITS):
030
ENTER BEGINNING YEAR (2 DIGITS):
00
ENTER ENDING LOCATION NO. OR SPACE TO REPEAT BEG LOC:

ENTER ENDING WATERSHED NO. OR SPACE TO REPEAT BEG WATERSHED:
031
ENTER ENDING YEAR OR SPACE TO REPEAT BEG YEAR:
99
IF YOUR REQUEST IS COMPLETE, ENTER END; ELSE SPACE:
end
DATA WILL BE COPIED TO:  ARS41.L69.MSTRQ.PART2
PRINT WILL BE ROUTED TO RMT29
READY
```

```
0        1         2         3         4         5     5  6
1........0.........0.........0.........0.........0.....6...0
 25001000004  1  5 63  300  0.0000  0.00 238.04 0    471
 25001000004  1  5 63 2400  0.0057  0.12 238.12 S    472
 25001000004  1  6 63 1500  0.0053  0.08 238.20 S    473
 25001000004  1 10 63  600  0.0000  0.00 238.20 0    474
 25001000004  1 10 63 2400  0.0006  0.01 238.21 S    475
```

Data column	Precipitation data field description	FORTRAN format
1	Carriage control character.	I1
2-3	Unique identification number for each location.	I2
4-6	Numeric identification for each station (unique for location).	I3
7-12	Unique rain gage identification (alphanumeric).	A6
13-21	Date of occurrence (month, day, year).	3I3
22-26	Time of day that activity occurred (24-hour clock).	I5
27-34	Precipitation intensity, in inches per hour, that occurred in time interval starting with previous time and ending with time recorded.	F8.4
35-40	Amount of precipitation in inches that occurred in time interval defined for intensity.	F6.2
41-47	Precipitation accumulation in inches that occurred during year through recorded time.	F7.2
48	Blank.	1X
49	Precipitation type codes: 0 or blank = rainfall, S = snow, N = rain and snow, L = sleet, H = hail, M = mixed, T = trace of precipitation, E = estimated value.	A1
50	Blank.	1X
51	Precipitation codes: 0 or blank = normal reading, 1 = total value for a series of days proportioned equally among the days.	I1
52-56	Sequential number. Records are numbered sequentially through each year of data.	I5
57-60	Blank columns. Record length = 60.	4X

Exhibit 1.--Standard precipitation data format.

```
0         1         2         3         4         5         6    6  7
1........0.........0.........0.........0.........0.........0....6...0
 25001 10 18 41 2127  0.00      .000 0.0000 0.0000  0.0000     121
 25001 10 18 41 2200  0.00   141.791 0.0051 0.0014  0.0014     122
 25001 10 18 41 2210  0.00   182.612 0.0040 0.0008  0.0022     123
 25001 10 18 41 2232  0.00   201.233 0.0015 0.0010  0.0032     124
 25001 10 18 41 2250  0.00   178.591 0.0038 0.0008  0.0040     125
```

Data column	Runoff data field description	FORTRAN format
1	Carriage control character.	A1
2-3	Unique identification number for each location.	I2
4-6	Numeric identification for each station (unique for location).	I3
7-15	Date of occurrence (month, day, year).	3I3
16-20	Time of day that activity occurred (24-hour clock).	I5
21-26	Flow depth in feet, if available.	F6.2
27-36	Runoff rate in cubic feet per second.	F10.3
37-43	Runoff rate in inches per hour.	F7.4
44-50	Runoff amount in inches that occurred in time interval starting with previous time and ending with time recorded.	F7.4
51-58	Runoff accumulation in inches that occurred during year through recorded time.	F8.4
59	Blank.	1X
60	Estimate code: E = estimate, blank = nonestimated.	A1
61	Rate type code: 0 or blank = rates in record are instantaneous, 1 = rates are averages for time interval.	I1
62-66	Sequential number. Records are numbered sequentially through each year of data.	I5
67-70	Blank columns. Record length = 70.	4X

Exhibit 2.--Standard runoff data format.

IDENT

The **IDENT** procedure provides general information about a watershed. It is completely interactive. Responses are displayed immediately at the terminal. The first line of information contains the identification of the watershed used by all **REPHLEX** procedures, followed by its location and local identification. Watershed area in acres is given. If more than one area value is appropriate (relocation of a weir, surveying correction, or changes in topography can cause areas to be modified), all values and corresponding periods of record are displayed. The word "PRESENT" under "PERIOD FOR ACREAGE" implies that the watershed is currently being monitored. A data field titled "AVAIL" provides beginning and ending years for runoff data accessible through **REPHLEX** procedures. Latitude and longitude are given in degrees, minutes, and seconds when available under "LAT" and "LONG."

Several searches can be made using this procedure to query for specific watershed characteristics. The "individual watershed" search will display all available information concerning a specific watershed. The "location" search will display all watersheds for a specific location number. The data requester should use this option with caution as there are locations with as many as 50 watershed entries. The "watershed area" search can be very useful for the data requester desiring to check on the availability of data from specific sized watersheds but should be used with discretion as a very long display can be generated. Approximately 30 percent of the 670 watersheds available have areas of 1-5 acres. The "state" search will display all watersheds for a specific State. This option should be used with caution since some States will produce a display of about 100 watersheds. The "latitude-longitude" search prompts for coordinates to select watersheds within a rectangle. It should be used with care as very long displays can be generated.

All five types of searches may be made in one session. Any time the procedure issues a prompt, the data requester may enter MENU to have the search options displayed and a new search initiated. END can be entered in response to any prompt to conclude the session.

Following is a sample session of **IDENT**. Operator entries are shown as lowercase letters and **REPHLEX** prompts as uppercase letters. All responses must be followed by pressing the **RETURN** key. Pressing the **RETURN** key by itself in response to a prompt will generate a space (null response).

Sample session

```
exec 'seanzwd.clib(ident)'
************************************************************
 NOTE: ENTER 'END' AT ANY TIME TO END YOUR SESSION.
       ENTER 'MENU' AT ANY TIME TO BEGIN A NEW SEARCH.
************************************************************
THE FOLLOWING SEARCHES ARE AVAILABLE WITH THIS PROCEDURE:
 I - INDIVIDUAL WATERSHED
 L - LOCATION
 A - WATERSHED AREA
 S - STATE
 C - LATITUDE-LONGITUDE
************************************************************
ENTER THE LETTER CODE FOR YOUR SEARCH:
i
ENTER A WATERSHED IDENTIFICATION (5 DIGITS):
08005

       08005      VERO BEACH    FL  W-5

    ACRES         PERIOD FOR ACREAGE      AVAIL         LAT    LONG
 ************    ******************    *********    ***************
      22650.      01/01/64 12/31/66     1964-1976     271840  805344
      20992.      01/01/67  PRESENT
ENTER A WATERSHED IDENTIFICATION (5 DIGITS):
end
READY
```

DPQRY

This procedure builds daily precipitation values and outputs them in table form to paper or to magnetic tape. Multiple years of data from multiple rain gages and multiple locations may be requested. Daily values can be derived from two sources of data, i.e., S&R files, which contain breakpoint data, or daily files, which are maintained primarily to cover gaps in the breakpoint (S&R) files. Unless a user is specifically working with only breakpoint or only daily values, both sources should be specified to give the most complete coverage. Printout of daily tables can be routed to an RJE terminal or held for later access by a TSO terminal.

An example of a typical session follows. Operator entries are shown as lowercase letters and prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key in lieu of a response generates a space (null response). See Chapter 3 for a detailed explanation of the prompts for priority, msgclass, destination, and fully qualified data set names. No listing will be generated by this sample session since the operator has specified that MSGCLASS=Q. In order to retrieve the daily tables that will be generated, the operator will subsequently enter the command OUTPUT SEAZDP69 from the interactive terminal. To retrieve all years of record for a particular station, it is allowable to enter 00 as a beginning year and 99 as an ending year. Likewise it is possible to retrieve all data available for a specific location by entering AAAAAA as a beginning rain gage identification and 999999 as an ending rain gage identification. Refer to the "Summary of the ARS Water Data Bank" (Appendix B) before making all-inclusive data requests to avoid excessive printouts.

Output of the sample session is daily tables (see exhibit 3). The output to magnetic tape has a record length of 100 characters and a blocksize of 9,400 characters. A record layout is provided in exhibit 4.

Sample session

```
exec 'seanzwd.clib(dpqry)'
ENTER JOBNAME:
seazdp69
ENTER PRIORITY:
2
ENTER PROJECT NUMBER:
9999999999
ENTER MSGCLASS (DEFAULT=A):
q
ENTER DESTINATION:
rmt29
 P - PRINTED TABLES ONLY
 T - TAPE FORMAT ONLY
 B - BOTH TAPE AND PRINTED TABLES
ENTER TYPE OUTPUT:
p
 S - S&R DATA ONLY
 D - DAILY DATA ONLY
 B - BOTH S&R DATA AND DAILY DATA
ENTER INPUT FILE OPTION:
s
ENTER BEGINNING LOCATION NUMBER (2 DIGITS):
69
ENTER BEGINNING RAIN GAGE ID (6 CHAR.):
aaaaaa
ENTER BEGINNING YEAR (2 DIGITS):
00
ENTER ENDING LOC NO. OR SPACE TO REPEAT BEG LOC:

ENTER ENDING RAIN GAGE ID OR SPACE TO REPEAT BEG RAIN GAGE ID:
999999
ENTER ENDING YEAR OR SPACE TO REPEAT BEG YEAR:
99
IF YOU HAVE NO MORE QUERIES, ENTER END; ELSE SPACE:
end
JOB SEAZDP69(JOB03911) SUBMITTED  **  FREE ALL FILES  **
END OF DPQRY
READY
```

LOCATION = CHICKASHA, OKLAHOMA
RAINGAGE = 000187

RUN DATE
01/05/83

LOC	GAGE	YEAR	DAY	JAN	FEB	MAR	APR	MAY	JUN	JLY	AUG	SEP	OCT	NOV	DEC	DAY
L69	RG000187	1966	1	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.00	.00	1
L69	RG000187	1966	2	.00	.00	.00	.00	.00	.00	.00	.32	.00	.00	.00	.00	2
L69	RG000187	1966	3	.00	.00	.00	.00	.00	.00	.00	.00	.64	.00	.00	.00	3
L69	RG000187	1966	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	4
L69	RG000187	1966	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5
L69	RG000187	1966	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6
L69	RG000187	1966	7	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	7
L69	RG000187	1966	8	.00	.00	.00	.00	.00	.40	.00	.00	.00	.02	.00	.00	8
L69	RG000187	1966	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12	.02	9
L69	RG000187	1966	10	.00	.00	.00	.00	.05	.00	.00	.06	.00	.00	.00	.00	10
L69	RG000187	1966	11	.00	.00	1.20	.00	.36	.00	.00	1.72	.00	.00	.00	.00	11
L69	RG000187	1966	12	.00	.00	.13	.00	.00	.00	.00	.00	.00	.00	.00	.00	12
L69	RG000187	1966	13	.00	.02	.00	.06	.00	.00	.00	.10	.98	.00	.00	.00	13
L69	RG000187	1966	14	.00	.00	.00	.00	.00	.00	.00	.00	.53	.00	.00	.00	14
L69	RG000187	1966	15	.00	.00	.00	.00	.00	1.11	.00	.00	.00	.00	.00	.00	15
L69	RG000187	1966	16	.00	.02	.00	.00	.00	.18	.00	.00	.24	.00	.00	.00	16
L69	RG000187	1966	17	.00	.00	.00	.00	.00	.22	.00	.00	.16	.37	.00	.00	17
L69	RG000187	1966	18	.00	.00	.00	.00	.00	.00	.00	.00	.55	.00	.00	.00	18
L69	RG000187	1966	19	.00	.00	.00	.00	.00	.00	.00	.87	.00	.00	.00	.00	19
L69	RG000187	1966	20	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00	20
L69	RG000187	1966	21	.00	.21	.00	.00	.15	.00	.00	.92	.00	.00	.00	.00	21
L69	RG000187	1966	22	.00	.00	.00	1.69	.00	.00	.00	.14	.00	.00	.00	.02	22
L69	RG000187	1966	23	.00	.00	.00	.88	.00	.00	.91	.94	.00	.00	.00	.00	23
L69	RG000187	1966	24	.00	.00	.00	.00	.00	.00	1.86	.31	.00	.00	.00	.00	24
L69	RG000187	1966	25	.00	.00	.00	1.18	.00	.00	.00	.00	.00	.00	.00	.00	25
L69	RG000187	1966	26	.00	.15	.00	.50	.00	.00	.00	.00	.00	.00	.48	.00	26
L69	RG000187	1966	27	.00	.61	.00	.00	.00	.00	.00	.00	.27	.00	.00	.21	27
L69	RG000187	1966	28	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	28
L69	RG000187	1966	29	.00	.00	.00	.00	.00	.00	.00	1.84	.00	.00	.00	.00	29
L69	RG000187	1966	30	.00	.00	.00	.10	.00	.00	.59	.03	.12	.00	.00	.01	30
L69	RG000187	1966	31	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00	.00	.00	31
MONTHLY ACCUMULATION				.00	1.01	1.33	4.41	.90	1.91	3.36	8.21	2.94	.39	.60	.30	

0699 RECORDS PROCESSED

YEARLY ACCUMULATION = 25.36

Exhibit 3.--Daily precipitation table.

DAILY PRECIPITATION TABLE

Data column	Data field description	FORTRAN format
1-2	Unique identification number for each location.	I2
3	Blank.	1X
4-9	Unique rain gage identification (alphanumeric).	A6
10	Blank.	1X
11-12	Year.	I2
13	Blank.	1X
14-15	Day of month.	I2
16	Blank.	1X
17-87	12 accumulations (inches) and precipitation type codes* (1 for each month of year).	12(F5.2,A1)

Each year consists of 31 records followed by a record of all 9's.

*Precipitation type codes: Blank = rainfall, S = snow, N = rain and snow, L = sleet, H = hail, M = mixed, T = trace of precipitation, E = estimated value, Z = total value for a series of days proportioned equally among the days.

Exhibit 4.--Daily precipitation tape format.

DQQRY

This procedure builds daily discharge values and outputs them in table form to paper or magnetic tape. Multiple years of data from multiple stations and multiple locations may be requested. Daily values may be requested in either volume (in/day) or mean daily discharge rate (cfs). Daily values can be derived from two sources of data, i.e., S&R files, which contain breakpoint data, or daily files, which are maintained primarily to cover gaps in the S&R files. Unless a user is specifically working with breakpoint or daily values, both sources should be specified to give the most complete coverage. Printout of daily tables can be routed to an RJE terminal or held for later access by a TSO terminal.

An example of a typical session follows. Operator entries are shown as lowercase letters and prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key without entering a response generates a space (null response). See Chapter 3 for a detailed explanation of the priority, msgclass, destination, and fully qualified data set names. This sample session will retrieve daily tables for 5 years for watershed 002 at location 42. To retrieve all years of record for a particular station, it is permissible to enter 00 as a beginning year and 99 as an ending year. Likewise it is possible to retrieve all data available for a specific location by entering 000 as a beginning station identification and 999 as an ending station identification. Refer to the "Summary of the ARS Water Data Bank" (Appendix B) before making all-inclusive data requests to avoid excessive printouts.

Output of the sample session is to magnetic tape. The record length for this file will be 120 characters and the blocksize will be 9,600 characters. Exhibit 5 is a sample of a printed daily table. A record layout for the tape file is provided in exhibit 6.

Sample session

```
exec 'seanzwd.clib(dqqry)'
ENTER JOBNAME:
seazdq42
ENTER PRIORITY:
1
ENTER PROJECT NUMBER:
9999999999
ENTER MSGCLASS (DEFAULT=A):
a
ENTER DESTINATION:
rmt29
 P - PRINTED TABLES ONLY
 T - TAPE FORMAT ONLY
 B - BOTH TAPE AND PRINTED TABLES
ENTER TYPE OUTPUT:
t
ENTER OUTPUT FILE NAME (FULLY QUALIFIED):
seanzwd.sample
ENTER PRINTED OUTPUT FORM (0=CFS, 1=IN/DAY):
1
 S - S&R DATA ONLY
 D - DAILY DATA ONLY
 B - BOTH S&R DATA AND DAILY DATA
ENTER INPUT FILE OPTION:
s
ENTER BEGINNING LOCATION NUMBER (2 DIGITS):
42
ENTER BEGINNING WATERSHED NUMBER (3 DIGITS):
002
ENTER BEGINNING YEAR (2 DIGITS):
73
ENTER ENDING LOC NO. OR SPACE TO REPEAT BEG LOC:

ENTER ENDING WATERSHED NO. OR SPACE TO REPEAT BEG WATERSHED:

ENTER ENDING YEAR OR SPACE TO REPEAT BEG YEAR:
77
IF YOU HAVE NO MORE QUERIES, ENTER END; ELSE SPACE:
end
JOB SEAZDQ42(JOB06642) SUBMITTED  **  FREE ALL FILES  **
END OF DQQRY
READY
```

LOCATION = RIESEL TX C
ACREAGE = 579.00

RUN DATE
01/04/83

TOTAL ACCUMULATED DISCHARGE IN INCHES/DAY

WSID	YEAR	DAY	JAN	FEB	MAR	APR	MAY	JUN	JLY	AUG	SEP	OCT	NOV	DEC	DAY
42002	1973	1	.0	.0436	.1912	.0001	.0001	.3092	.0	.0	.0	.0	.0096	.0	1
42002	1973	2	.0003	.0063	.0735	.0001	.0001	.1164	.0	.0	.0	.0	.0022	.0	2
42002	1973	3	.2504	.0022	.0124	.0001	.0001	1.7287	.0	.0	.0	.0	.0007	.0001	3
42002	1973	4	.0161	.0013	.0071	.0002	.0	.1261	.0	.0	.0	.0	.0005	.0002	4
42002	1973	5	.0048	.0009	.0037	.0002	.0001	.3804	.0	.0	.0	.0	.0001	.0001	5
42002	1973	6	.0023	.0008	.0039	.0	.0003	.1141	.0	.0	.0	.0	.0001	.0	6
42002	1973	7	.1418	.0008	.0033	.0002	.0182	.0078	.0	.0	.0	.0	.0001	.0	7
42002	1973	8	.0225	.1212	.0019	.0001	.0026	.0015	.0	.0	.0	.0	.0001	.0	8
42002	1973	9	.0042	.0152	.0047	.0002	.0005	.0004	.0	.0	.0	.0	.0	.0	9
42002	1973	10	.0014	.0043	.2693	.0002	.0	.0001	.0	.0	.0	.0	.0	.0	10
42002	1973	11	.0012	.0023	.0180	.0002	.0001	.0001	.0	.0	.0	.9870	.0	.0	11
42002	1973	12	.0012	.0016	.0041	.0	.0	.0001	.0	.0	.0	.0275	.0	.0	12
42002	1973	13	.0043	.0013	.0023	.0001	.0	.0001	.0	.0	.0	.3644	.0	.0	13
42002	1973	14	.0100	.0007	.0015	.0	.0	.0	.0	.0	.0	.0191	.0	.0	14
42002	1973	15	.0049	.0004	.0016	.1948	.0	.0001	.0	.0	.0	.0609	.0	.0	15
42002	1973	16	.0025	.0003	.4425	.1582	.0	.0	.0	.0	.0	.3648	.0	.0	16
42002	1973	17	.0018	.0005	.0162	.3214	.0	.0	.0	.0	.0	.0152	.0	.0	17
42002	1973	18	.0014	.0004	.0043	.0486	.0	.0	.0	.0	.0	.0024	.0	.0	18
42002	1973	19	.0009	.0004	.0020	.0104	.0	.0	.0	.0	.0	.0007	.0	.0978	19
42002	1973	20	.0008	.0003	.0010	.0047	.0	.0	.0	.0	.0	.0003	.0003	.0085	20
42002	1973	21	.0101	.0009	.0005	.0024	.0	.0001	.0	.0	.0	.0	.0001	.0019	21
42002	1973	22	.0027	.0599	.0003	.0042	.0	.0	.0	.0	.0	.0001	.0001	.0008	22
42002	1973	23	.0010	.0515	.0002	.1000	.0	.0	.0	.0	.0	.0	.0001	.0007	23
42002	1973	24	.0006	.0128	1.6034	1.9825	.0	.0	.0	.0	.0	.0	.0002	.0004	24
42002	1973	25	1.2700	.0048	.0189	.0638	.3886	.0	.0	.0	.0	.0	.0001	.0002	25
42002	1973	26	.0979	.0025	.0032	.0089	.6645	.0	.0	.0	.0	.0001	.0001	.0002	26
42002	1973	27	.0157	.0016	.0013	.0018	.0065	.0	.0	.0	.0	.0	.0002	.0	27
42002	1973	28	.0037	.0011	.0007	.0006	.0007	.0	.0	.0	.0	.0001	.0	.0001	28
42002	1973	29	.0012	.0	.0004	.0002	.0001	.0	.0	.0	.0	.0	.0	.0	29
42002	1973	30	.0009	.0	.0003	.0002	.0	.0	.0	.0	.0	.3235	.0	.0	30
42002	1973	31	.0536	.0	.0002	.0	.0	.0	.0	.0	.0	.2801	.0	.0	31
MEAN CFS			1.5146	.2953	2.1139	2.3551	.8494	2.2584	.0000	.0000	.0000	1.9196	.0118	.0871	
INCHES			1.9302	.3399	2.6939	2.9044	1.0825	2.7852	.0000	.0000	.0000	2.4462	.0146	.1110	

2959 RECORDS PROCESSED

YEARLY ACCUMULATION = 14.307

Exhibit 5.--Daily runoff table.

DAILY RUNOFF TABLE

Data column	Data field description	FORTRAN format
1-2	Unique identification number for each location.	I2
3-5	Numeric identification for each station (unique for location).	I3
6	Blank.	1X
7-8	Year.	I2
9	Blank.	1X
10-11	Day of month.	I2
12	Blank.	1X
13-120	12 volumes (inches) and estimate codes (1 for each month of year).	12(F8.4,A1)

Each year consists of 31 records followed by a record of all 9's.

Exhibit 6.--Daily runoff tape format.

PLOTYR

This procedure is designed to plot rainfall hyetographs superimposed over runoff hydrographs from continuous breakpoint data. It provides the data requester with the ability to review a series of storm events in an interactive mode. The **PLOTYR** procedure executes a Fortran program using "DISSPLA" plot routines to output data to a graphics screen or to a pen plotter. The program plots data for timespans of up to a maximum of 1 month per plot frame. The user can specify time periods within that month to be redisplayed or replotted. The data for a part (parts) of a specific time period can be plotted repeatedly as long as the operator does not proceed to the next month. The data plotted by this program must be in online disk files in S&R format. Since this procedure does not differentiate among different types of precipitation, the terms "rainfall" and "precipitation" are used interchangeably. The **WDLCOPY** procedure can be used to copy precipitation and runoff data to disk.

The **PLOTYR** procedure gives the operator the option of producing plots in English or metric units. The English units are in/hr for rainfall intensities and cfs for runoff rates. The metric units are mm/s for rainfall intensities and l/s for runoff. Time increments are always displayed as fractional days.

A sample session of **PLOTYR** follows. Operator entries are shown as lowercase letters and prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key without entering a response generates a zero (null response). The first prompts in this procedure request the names for previously existing files to be input to the program. For a detailed explanation of fully qualified data set names, see Chapter 3 (p. 9). Either the rainfall or runoff file can be nullified by entering DUMMY when prompted for a data set name.

In the following sample session the operator has elected not to plot any of the January data. For the month of February the user requested the **PLOTYR** procedure to plot the time period from February 18 at 12 noon (18.5 in days and fractional part thereof) to February 19 at 12 midnight (20.0 in decimal days). The screen will be automatically cleared and the plot produced at this point. When the plot frame is complete, the system will signal the operator with an audible "beep." If a flatbed plotter is being used, the paper should be changed at this point. When ready to continue, the operator should press the **HOME/PAGE** key and the **RETURN** key. The **PLOTYR** procedure will continue by generating the ENTER BEG & END DAY prompt. The operator may then enter another timespan for February or enter 99 to continue with data for March. The number 00 can be entered at any time to create a plot of the full month of

data. The operator may cancel the session at any time by entering the number 77 in response to a BEG & END DAY prompt. A sample of the pen plot generated by this session is shown in exhibit 7.

Sample session

```
exec 'seanzwd.clib(plotyr)'
ENTER RAINFALL DSN (FULLY QUALIFIED):
seanzsw.plt.137.rain
ENTER RUNOFF DSN (FULLY QUALIFIED):
seanzsw.plt.137.runoff
*******************************************
* PLOTYR SUPPORTS THE FOLLOWING DEVICES:    *
*  TK4010 - TEKTRONIX 4010 & 4050 SERIES    *
*  TK4025 - TEKTRONIX MODEL 4025            *
*  TK4027 - TEKTRONIX MODEL 4027            *
*  TK4662 - TEXTRONIX FLATBED PLOTTER       *
*  CALCMP - CALCOMP                         *
*  HP2647 - HEWLETT-PACKARD 2647            *
*  HP2648 - HEWLETT-PACKARD 2648            *
*  HP7221 - HEWLETT-PACKARD FLATBED PLOTTER *
*  HP9872 - HEWLETT-PACKARD FLATBED PLOTTER *
*******************************************
ENTER YOUR DEVICE TYPE (6 CHAR.):
tk4662
PLEASE WAIT - FILES BEING ALLOCATED
METRIC CONVERSION? 1=Y,9=N:
9
**************************************
SPECIAL RESPONSES TO FOLLOWING PROMPTS:
99 - PROCEED TO NEXT MONTH
00 - PLOT ENTIRE MONTH
77 - END SESSION
**************************************
PEAK FLOW=   70.8220 CFS FOR JAN 1974
ENTER BEG & END DAY OF JAN 1974 OR SPECIAL (99,00,77):
BB.BB EE.EE
99
PEAK FLOW =  182.7662 CFS FOR FEB 1974
ENTER BEG & END DAY OF FEB 1974 OR SPECIAL (99,00,77):
BB.BB EE.EE
18.50 20.00
     *
     *
     * Plot produced here.
     *
     *
ENTER BEG & END DAY OF FEB 1974 OR SPECIAL (99,00,77):
BB.BB EE.EE
77
READY
```

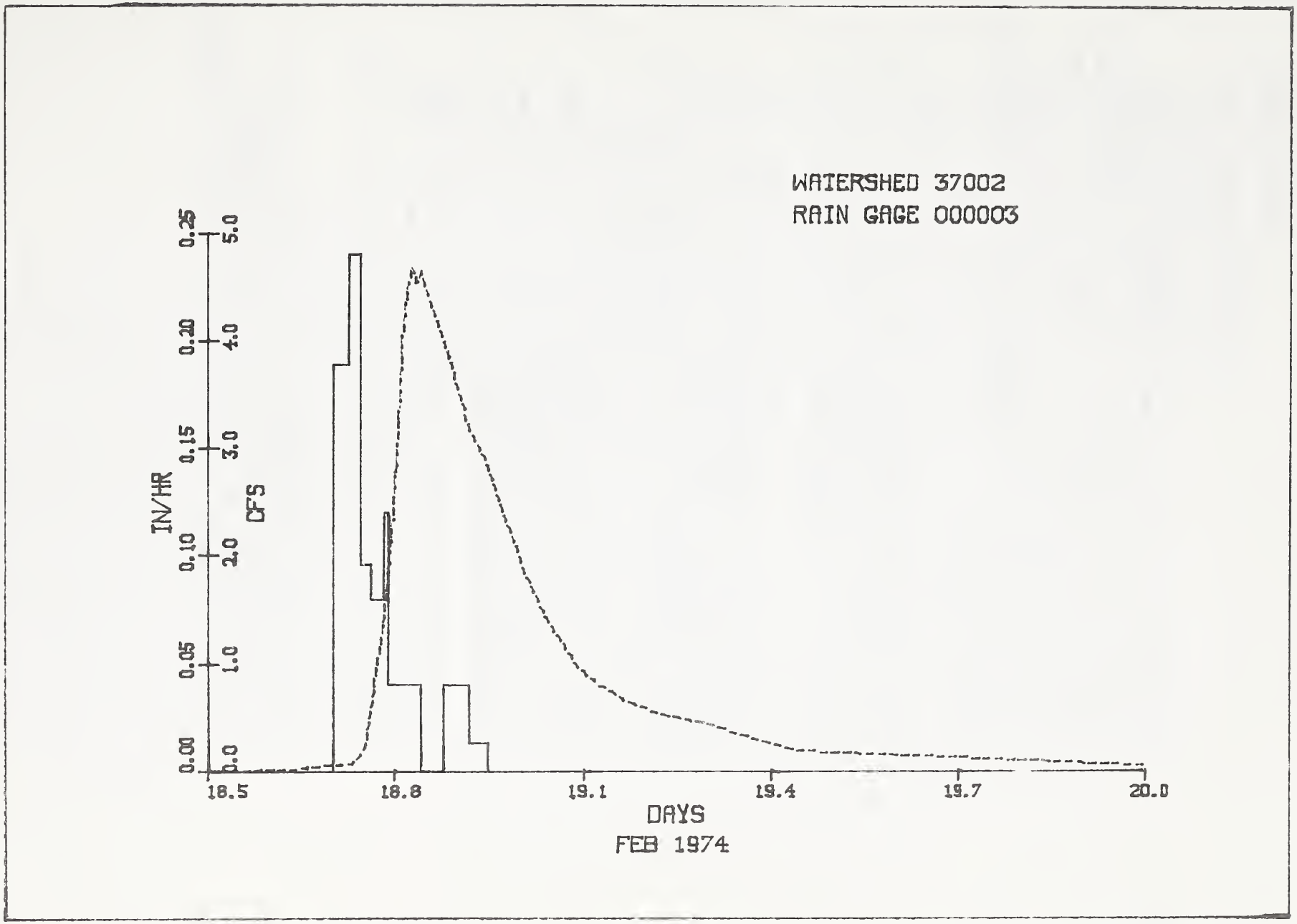

Exhibit 7.--Pen plot from **PLOTYR** procedure.

SASPLOTP

The **SASPLOTP** procedure provides the **REPHLEX** user with the ability to generate line printer plots of selected parts of any precipitation file in the ARS Water Data Bank. The procedure allows the user to interactively structure a query for a specified year of data, isolating and plotting the observations falling within specified time intervals for that year. Since this procedure does not differentiate among the different types of precipitations, the terms "rainfall" and "precipitation" are used interchangeably.

Two plot options are available for use. The accumulation curve option plots total accumulation (inches) versus total elapsed time (minutes). The hyetograph option plots rainfall intensity (in/hr) versus total elapsed time. Accompanying each plot is a listing of the individual data observations that generated the plot.

The session begins with the user interactively entering a project number, job priority, and destination. See Chapter 3 for a description of these parameters. Next the user is prompted to identify the desired data file by entering a two-digit location number, a six-character rain gage identifier, and a two-digit year for the data desired for plotting (1 year per session). Plots are then requested by specifying time intervals and plot options (see following sample session). Any number of plots may be specified for a given year of data. Time intervals may range from a few minutes to an entire year. After all plot intervals for a given year have been defined, the procedure automatically creates and submits a batch job to produce the plots.

When using this procedure, the user should be aware of the limitation of the line printer as a graphics device. Plot resolution is directly related to the density of observations within a given time interval (i.e., few points result in high resolution and many points in low resolution).

In the following sample session, operator entries are shown as lowercase letters and **REPHLEX** prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key without entering a response generates a space (null response). A sample hyetograph is shown in exhibit 8.

Sample session

```
exec 'seanzwd.clib(sasplotp)'
****************************
* PLOT RAINFALL TO PRINTER *
****************************
ENTER PROJECT NUMBER:
9999999999
ENTER JOB PRIORITY:
3
ENTER DESTINATION:
rmt29
ENTER 2-DIGIT LOCATION NUMBER:
37
ENTER 6-CHARACTER RAIN GAGE ID:
000003
ENTER 2-DIGIT DATA YEAR:
74
ENTER INTERVAL BEGIN DATE (MMDD):
0919
ENTER 4-DIGIT BEGIN TIME (DEFAULT 0000):
0600
ENTER INTERVAL END DATE (MMDD):
0919
ENTER 4-DIGIT END TIME (DEFAULT 2400):
2400
DATA WILL BE PLOTTED FOR L37.RG000003.Y1974 FOR THE INTERVAL:
   BEGIN - 0919 (06:00)
   END   - 0919 (24:00)
IF INCORRECT, TYPE (X):

ENTER TYPE PLOT (1)-ACCUMULATION (2)-INTENSITY:
2
MORE PLOTS FROM THIS RAIN GAGE YEAR? (Y)-YES (N)-NO:
n
JOB SEANZ74P(JOB06279) SUBMITTED  **  FREE ALL FILES  **
END OF SEANZWD.CLIB(SASPLOTP)
READY
```

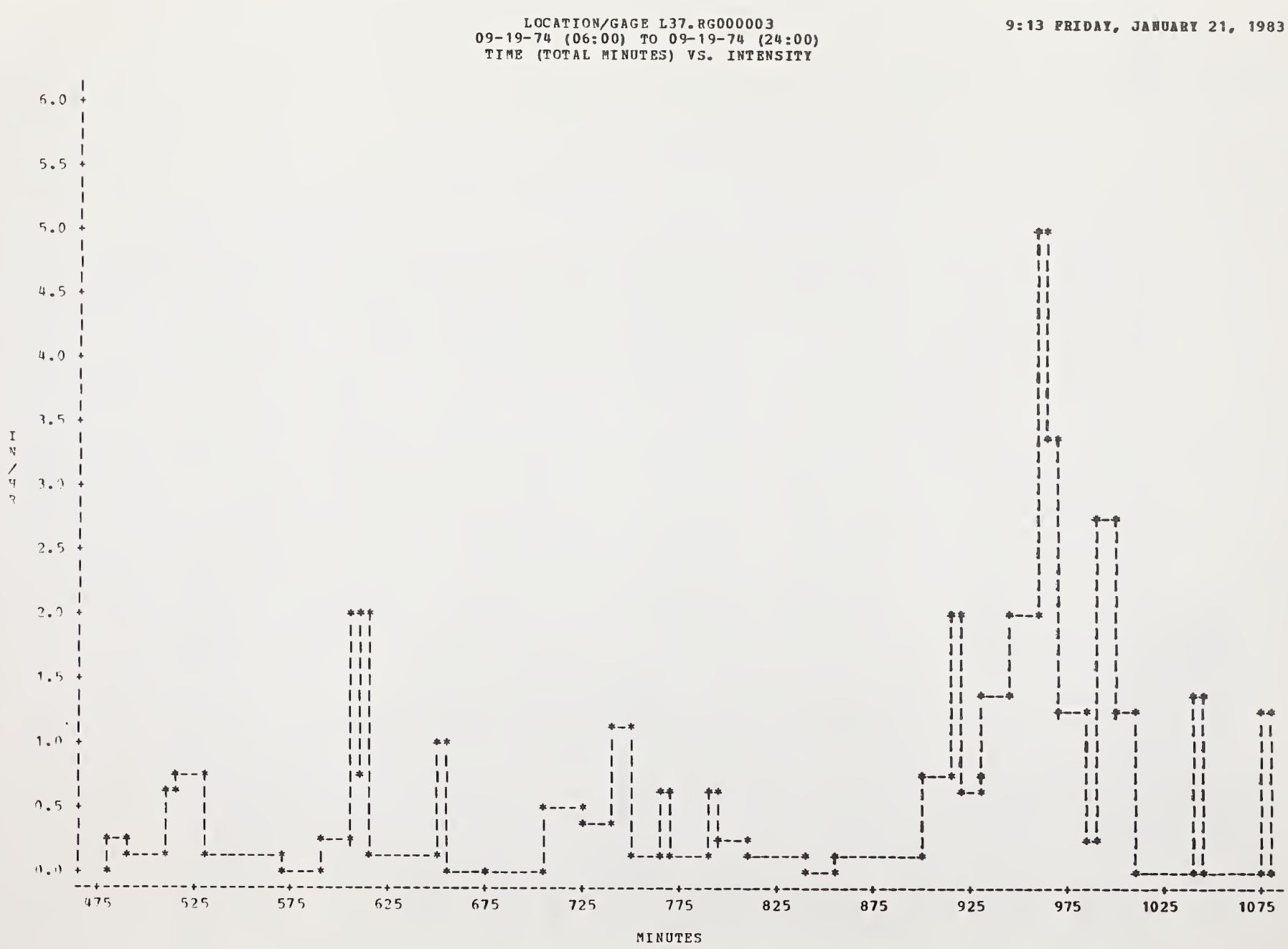

Exhibit 8.--Printer plot from **SASPLOTP** procedure.

SASPLOTQ

The **SASPLOTQ** procedure provides the **REPHLEX** user with the ability to generate line printer hydrographs of selected parts of any runoff file in the ARS Water Data Bank. The procedure allows the user to interactively structure a query for a specified year of data, isolating and plotting the observations falling within specified time intervals for that year. **SASPLOTQ** plots runoff rates (in/hr or cfs) versus total elapsed time (minutes) for any time interval specified by the user. Accompanying each plot is a listing of the individual data observations that generated the plot.

The session begins with the user interactively entering a project number, job priority, and destination. See Chapter 3 for a description of these parameters. Next the user is prompted to identify the desired data file by entering a two-digit location number, a three-digit watershed number, and a two-digit year for the data desired for plotting (1 year per session). Plots are then requested by specifying time intervals and runoff rate options (see following sample session). Any number of plots may be specified for a given year of data. Time intervals may range from a few minutes to an entire year. After all plot intervals for a given year have been defined, the procedure automatically creates and submits a batch job to produce the plots.

When using this procedure, the user should be aware of the limitation of the line printer as a graphics device. Plot resolution is directly related to the density of observations within a given time interval (i.e., few points result in high resolution and many points in low resolution). A sample hydrograph is shown in exhibit 9.

In the following sample session, operator entries are shown as lowercase letters and prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key without entering a response generates a space (null or default response).

Sample session

```
exec 'seanzwd.clib(sasplotq)'
*************************
* PLOT RUNOFF TO PRINTER *
*************************
ENTER PROJECT NUMBER:
9999999999
ENTER JOB PRIORITY:
3
ENTER DESTINATION:
rmt29
ENTER 2-DIGIT LOCATION NUMBER:
37
ENTER 3-DIGIT WATERSHED NUMBER:
002
ENTER 2-DIGIT DATA YEAR:
74
ENTER INTERVAL BEGIN DATE (MMDD):
0919
ENTER 4-DIGIT BEGIN TIME (DEFAULT 0000):
0600
ENTER INTERVAL END DATE (MMDD):
0919
ENTER 4-DIGIT END TIME (DEFAULT 2400):

DATA WILL BE PLOTTED FOR L37.W002.Y1974 FOR THE INTERVAL:
   BEGIN - 0919 (06:00)
   END   - 0919 (24:00)
IF INCORRECT, TYPE (X):

ENTER TYPE PLOT (1)-CFS (2)-INCHES PER HOUR:
2
MORE PLOTS FROM THIS WATERSHED YEAR? (Y)-YES (N)-NO:
n
JOB SEANZ74Q(JOB06279) SUBMITTED  **  FREE ALL FILES  **
END OF SEANZWD.CLIB(SASPLOTQ)
READY
```

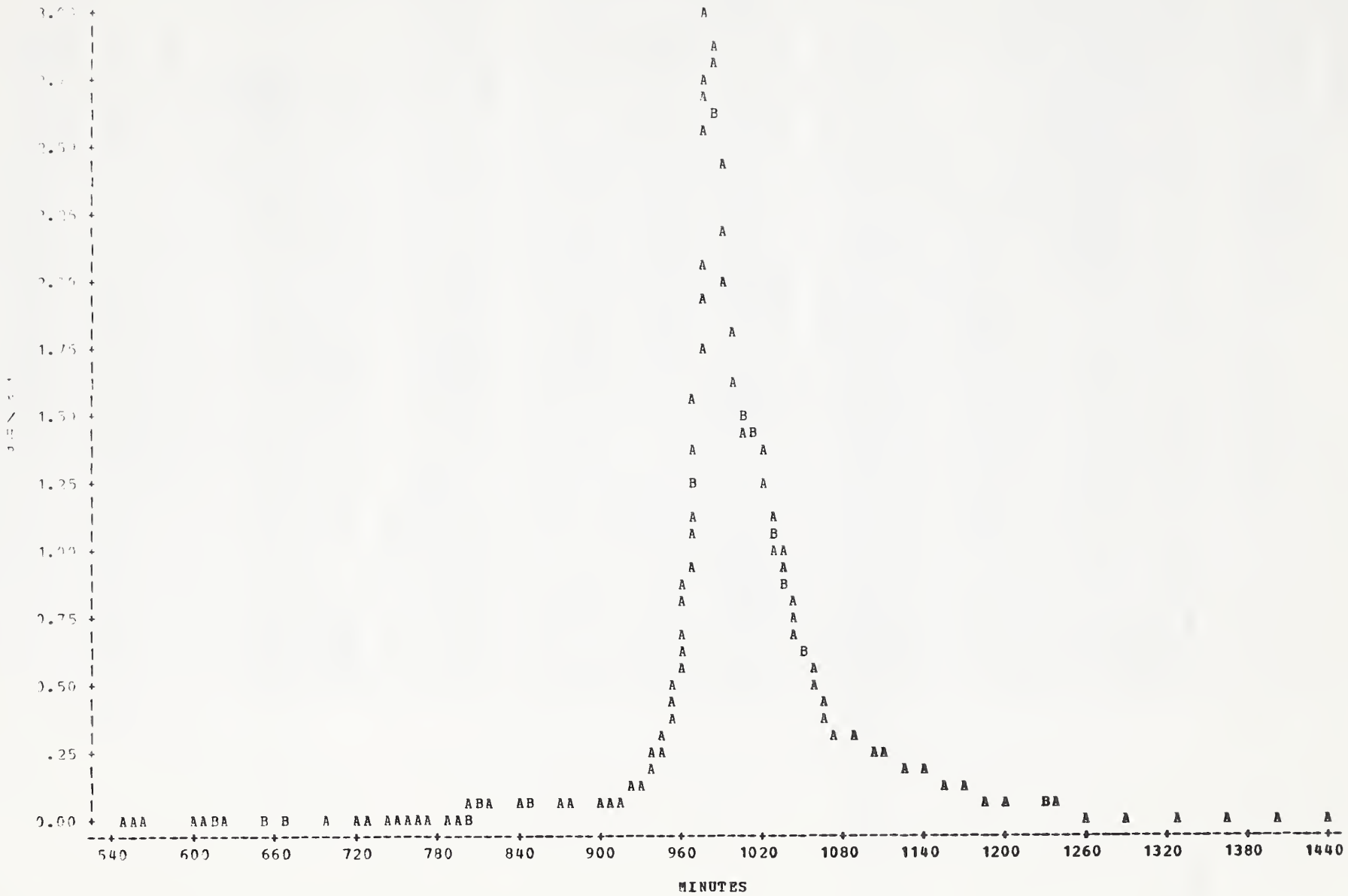

Exhibit 9.--Printer plot from **SASPLOTQ** procedure.

SASGRAFP

The **SASGRAFP** procedure provides online, interactive graphics support to those **REPHLEX** users with access to one of various graphics terminals and plotters. See the following sample session for a complete list of devices supported by this procedure. The user may plot any precipitation data stored in online disk files in S&R format. Refer to **WDLCOPY** for information on creating online data files from the ARS Water Data Bank. Since this procedure does not differentiate among the different types of precipitation, the terms "rainfall" and "precipitation" are used interchangeably.

Two plot options are available through **SASGRAFP**. The accumulation curve option plots total rainfall accumulation (inches) versus total time (minutes) for a user specified time interval. The hyetograph option plots rainfall intensity (in/hr) versus total time (minutes) for a given period.

The procedure consists of two phases, environment definition and plot production. The environment definition phase consists of responding to interactive prompts for the type of graphics device being used and the input data set name. This phase is performed once for each session. Phase two is performed for each plot desired. It consists of responding to interactive prompts for starting date and time, ending date and time, and type of plot desired. After each plot is finished, the user may continue plotting or terminate the session. The procedure will continually loop through phase two until termination is requested. A sample pen plot is shown in exhibit 10.

In the following sample session, operator entries are shown as lowercase letters and **REPHLEX** prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key without a response generates a space (null response).

WARNING: Considerable computer resources are required to generate plots using this procedure. Depending on the size of the input file and the number of observations within the specified time interval, a series of plots produced by **SASGRAFP** may range from $10 to $30 or more. User discretion is advised.

Sample session

```
exec 'seanzwd.clib(sasgrafp)'
***********************************************
* PLOT RAINFALL INTERACTIVELY (USING SASGRAPH)*
***********************************************

ENTER (1) FOR INSTRUCTIONS ON USE OF THIS PROCEDURE:
1
THIS PROCEDURE SHOULD BE USED ONLY IF THE DATA TO BE PLOTTED
ARE RESIDENT IN AN ONLINE DISK DATA SET, THE DATA ARE IN
STORAGE AND RETRIEVAL FORMAT, AND THE GRAPHICS DEVICE
IS ONE OF THE FOLLOWING TYPES:

  TEKTRONICS - 4010,4025,4027,4051,4662,4663
  HP - 2647,2648,7220,7221,9872(W/A 2647 TERMINAL)
  CALCOMP - 1012, ADI 50, RAMTEK 6200, IBM 3278/9,
  ZETA 1453, CHROMATICS 1398/9, 1598/9, 1998/9, SERVOGOR 281

WHEN PROMPTED, SPECIFY THE PLOT DEVICE BY ENTERING THE MANUFACTURER'S ABBREVIATION
FOLLOWED BY THE MODEL NUMBER OF THE DEVICE BEING USED FOR THE PLOT (EXAMPLE:
TEK4025,HP2647,CAL1012,ADI50,RAM6200,IBM3278,ZET1453,CHR1398,
SER281).

IF YOU CANNOT SATISFY THE ABOVE CRITERIA, PRESS THE BREAK KEY
TO EXIT THIS PROCEDURE AND EXECUTE 'SEANZWD.CLIB(SASPLOTP)' TO
GENERATE LINE PRINTER PLOTS.

ENTER FULLY QUALIFIED FILE NAME:
seanzsw.plt.l37.RG000003.Y1974
ENTER PLOT DEVICE:
TEK4010
ENTER LOCATION-GAGE IDENTIFIER (ANY FORMAT):
137-rg03
ENTER 2-DIGIT DATA YEAR:
74
ENTER INTERVAL BEGIN DATE (MMDD):
0919
ENTER 4-DIGIT BEGIN TIME (DEFAULT 0000):
0600
ENTER INTERVAL END DATE (MMDD):
0919
ENTER 4-DIGIT END TIME (DEFAULT 2400):
2400
DATA WILL BE PLOTTED FOR 'SEANZSW.PLT.L37.RG000003.Y1974' FOR THE INTERVAL:
  BEGIN - 0919 (06:00)
  END   - 0919 (24:00)
IF DATES WRONG, ENTER (X):

ENTER TYPE PLOT (1)-ACCUMULATION (2)-INTENSITY:
1
NOTE: SAS RELEASE 79.5 AT WASHINGTON COMPUTER CENTER (006830).

NOTE: INFILE IN IS:
      DSNAME=SEANZSW.PLT.L37.RG000003.Y1974
      UNIT=SYSDA,VOL=SER=STOR44,DISP=SHR,
```

```
      DCB=(BLKSIZE=4620,LRECL=70,RECFM=FB)
NOTE: 66 LINES WERE READ FROM INFILE IN.
NOTE: DATA SET WORK.SASGRAFP HAS 65 OBSERVATIONS AND 33 VARIABLES. 69 OBS/TRK.

PRESS RETURN AFTER EACH BELL TO CONTINUE.
     *
     *
     * Plot produced here.
     *
     *
NOTE: SAS INSTITUTE, SAS CIRCLE, BOX 8000, CARY NC 27511.

MORE PLOTS/ (Y)-YES (N)-NO:
n
END OF SEANZWD.CLIB(SASGRAFP)
READY
```

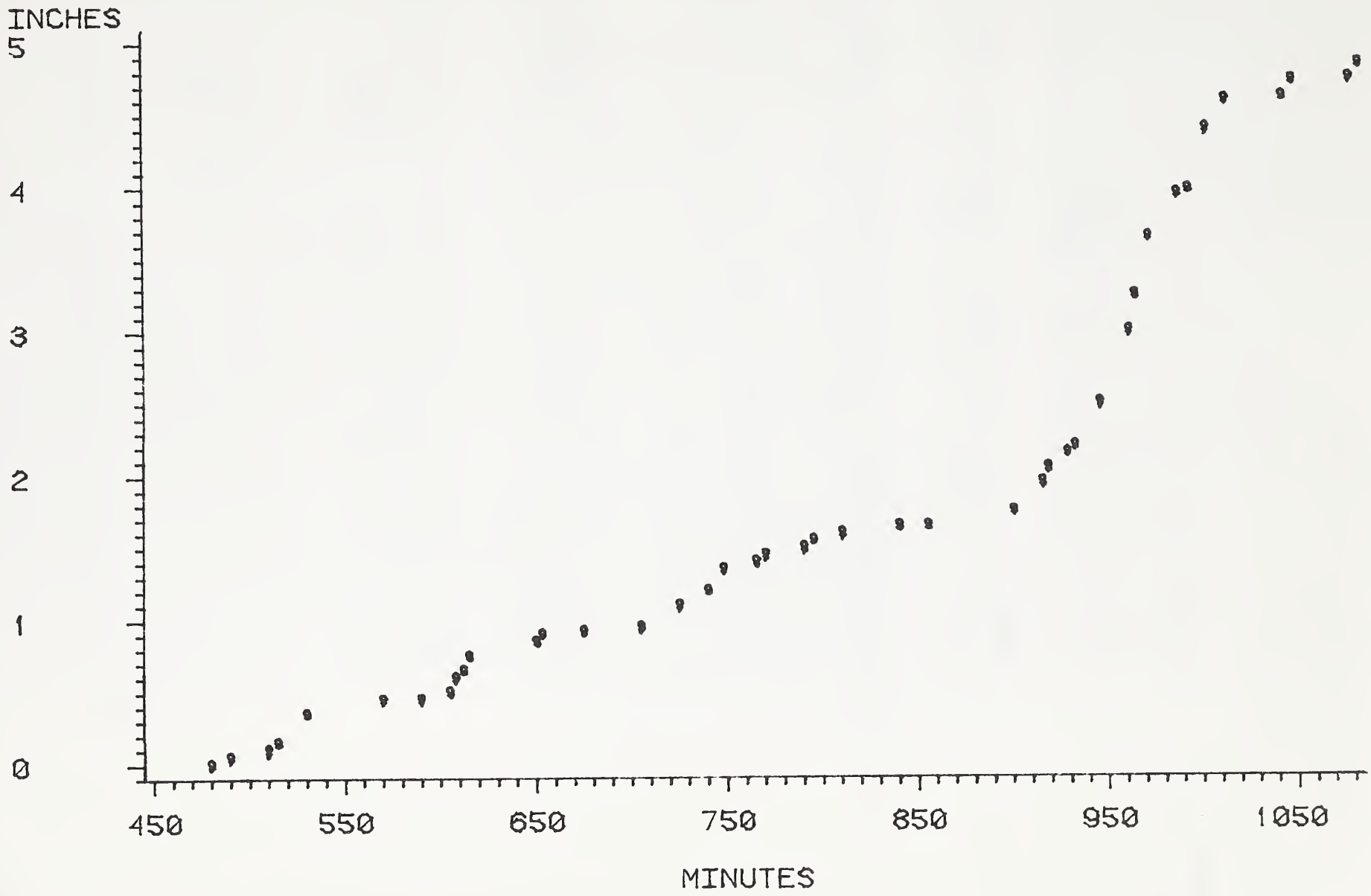

Exhibit 10.--Pen plot from **SASGRAFP** procedure.

SASGRAFQ

The **SASGRAFQ** procedure provides online, interactive graphics support to those **REPHLEX** users with access to one of various graphics terminals and plotters. See the following sample session for a complete list of devices supported by this procedure. The user may plot any runoff data stored in online disk files in S&R format. Refer to **WDLCOPY** for information on creating online data files from the ARS Water Data Bank.

SASGRAFQ plots runoff hydrographs for any specified time period within a given year of runoff data. Runoff rates are plotted in either in/hr or cfs versus total elapsed time for each event.

The procedure consists of two phases, environment definition and plot production. The environment definition phase consists of responding to interactive prompts for the type of graphics device being used and the input data set name. This phase is performed once for each session. Phase two is performed for each plot desired. It consists of responding to interactive prompts for starting date and time, ending date and time, and intensity scale desired. After each plot is finished, the user may continue plotting or terminate the session. The procedure will continually loop through phase two until termination is requested. A sample pen plot is shown in exhibit 11.

In the following sample session, operator entries are shown as lowercase letters and **REPHLEX** prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key without a response generates a space (null response).

WARNING: Considerable computer resources are required to generate plots using this procedure. Depending on the size of the input file and the number of observations within the specified time interval, a series of plots produced by **SASGRAFQ** may range from $10 to $30 or more. User discretion is advised.

Sample session

```
exec 'seanzwd.clib(sasgrafq)'
*********************************************
* PLOT RUNOFF INTERACTIVELY (USING SASGRAPH) *
*********************************************

ENTER (1) FOR INSTRUCTIONS ON USE OF THIS PROCEDURE:
1
THIS PROCEDURE SHOULD BE USED ONLY IF THE DATA TO BE PLOTTED
ARE RESIDENT IN AN ONLINE DISK DATA SET, THE DATA ARE IN
STORAGE AND RETRIEVAL FORMAT, AND THE GRAPHICS DEVICE
IS ONE OF THE FOLLOWING TYPES:

  TEKTRONICS - 4010,4025,4027,4051,4662,4663
  HP - 2647,2648,7220,7221,9872(W/A 2647 TERMINAL)
  CALCOMP - 1012, ADI 50, RAMTEK 6200, IBM 3278/9,
  ZETA 1453, CHROMATICS 1398/9, 1598/9, 1998/9, SERVOGOR 281

WHEN PROMPTED, SPECIFY THE PLOT DEVICE BY ENTERING THE MANUFACTURER'S ABBREVIATION
FOLLOWED BY THE MODEL NUMBER OF THE DEVICE BEING USED FOR THE PLOT (EXAMPLE:
TEK4025,HP2647,CAL1012,ADI50,RAM6200,IBM3278,ZET1453,
CHR1398,SER281).

IF YOU CANNOT SATISFY THE ABOVE CRITERIA, PRESS THE BREAK KEY
TO EXIT THIS PROCEDURE AND EXECUTE 'SEANZWD.CLIB(SASPLOTQ)' TO
GENERATE LINE PRINTER PLOTS.


ENTER FULLY QUALIFIED FILE NAME:
seanzsw.plt.l69.w030.y1965
ENTER PLOT DEVICE:
TEK4010
ENTER LOCATION-GAGE IDENTIFIER (ANY FORMAT):
169.w030
ENTER 2-DIGIT DATA YEAR:
65
ENTER INTERVAL BEGIN DATE (MMDD):
0807
ENTER 4-DIGIT BEGIN TIME (DEFAULT 0000):

ENTER INTERVAL END DATE (MMDD):
0809
ENTER 4-DIGIT END TIME (DEFAULT 2400):

DATA WILL BE PLOTTED FOR 'SEANZSW.PLT.L69.W030.Y1965' FOR THE INTERVAL:
  BEGIN - 0807 (00:00)
  END   - 0809 (24:00)
IF DATES WRONG, ENTER (X):

ENTER TYPE PLOT (1)-CFS (2)-IN/HR:
1
NOTE: SAS RELEASE 79.5 AT WASHINGTON COMPUTER CENTER (006830).
```

```
NOTE: INFILE IN IS:
      DSNAME=SEANZSW.PLT.L69.W030.Y1965
      UNIT=SYSDA,VOL=SER=STOR44,DISP=SHR,
      DCB=(BLKSIZE=4620,LRECL=70,RECFM=FB)
NOTE: 66 LINES WERE READ FROM INFILE IN.
NOTE: DATA SET WORK.SASGRAFQ HAS 65 OBSERVATIONS AND 33 VARIABLES. 69 OBS/TRK.

PRESS RETURN AFTER EACH BELL TO CONTINUE.
     *
     *
     * Plot produced here.
     *
     *
NOTE: SAS INSTITUTE, SAS CIRCLE, BOX 8000, CARY NC 27511.

MORE PLOTS/ (Y)-YES (N)-NO:
n
END OF SEANZWD.CLIB(SASGRAFQ)
READY
```

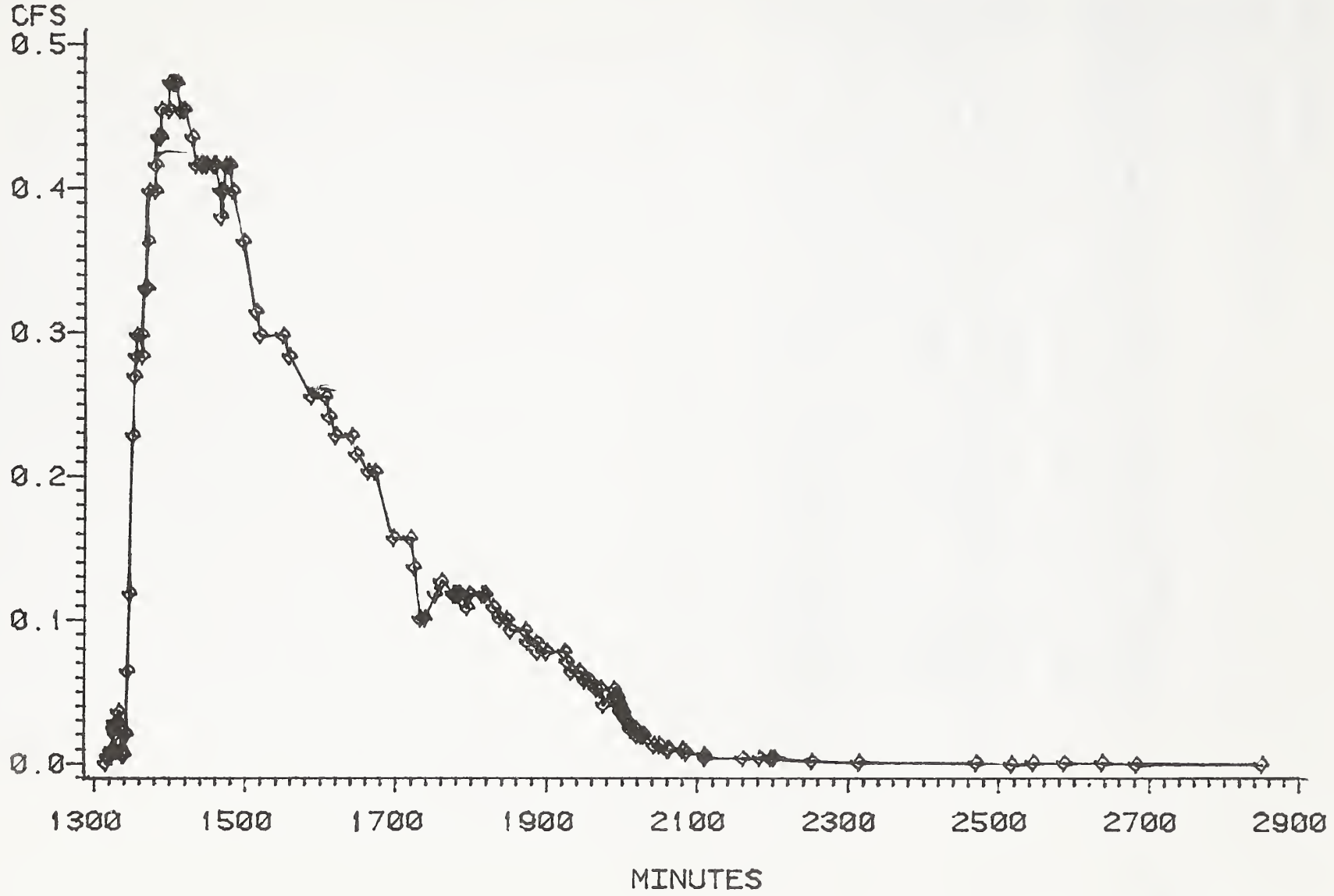

Exhibit 11.--Pen plot from **SASGRAFQ** procedure.

SPRDSHT

This **REPHLEX** procedure provides updates for the "Summary of the ARS Water Data Bank" (see Appendix B). The procedure creates a batch job to print the report for all or selected locations. For a partial report, the operator must enter a two-digit number for each location desired.

A sample session of the **SPRDSHT** procedure follows. Operator entries are shown as lowercase letters and prompts as uppercase letters. All responses must be concluded by pressing the **RETURN** key. Pressing the **RETURN** key without entering a response will generate a space (null response). For a detailed explanation of the jobname, priority, destination, and msgclass prompts, refer to Chapter 3. One page of the printout from this sample session is shown in exhibit 12. For a complete description of the report, refer to Appendix B.

Sample session

```
exec 'seanzwd.clib(sprdsht)'
ENTER JOBNAME:
seazprnt
ENTER PRIORITY:
3
ENTER PROJECT NUMBER:
9999999999
ENTER MSGCLASS (DEFAULT=A):
a
ENTER DESTINATION:
rmt29
DO YOU WANT A COMPLETE UPDATE FOR ALL LOCATIONS? (Y-YES, N-NO):
n
ENTER LOCATION NUMBER (2 DIGITS):
08
ENTER LOCATION NUMBER OR END:
73
ENTER LOCATION NUMBER OR END:
end
JOB SEAZPRNT(JOB06396) SUBMITTED  **  FREE ALL FILES  **
READY
```

L08 - VERO BEACH, FL

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000002 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000003 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000004 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000005 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000006 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000007 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

7 RAINGAGES
14 STATION YEARS - BREAKPOINT
154 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
002 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDDD.D    .     .
003 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDDD.D    .     .
005 .     .     .     .     .     .   DD.DDDDD.DDDDD.D    .     .
```

3 WATERSHEDS
0 STATION YEARS - BREAKPOINT
57 STATION YEARS - DAILY

Exhibit 12.--Sample page from **SPRDSHT** procedure.

NEWS

This **REPHLEX** procedure provides to the users any messages concerning modifications or additions to the system. These messages are changed as needed. A sample session of the **NEWS** procedure follows.

Sample session

```
exec 'seanzwd.clib(news)'
*******************************
DECEMBER 1982
FOR HELP WITH REPHLEX PROCEDURES
CALL THE WATER DATA LABORATORY
FTS 344-3550 OR
COMM. 301-344-3550
*******************************
READY
```

APPENDIX A - INDEX TO INFORMATION ON EXPERIMENTAL AGRICULTURAL WATERSHEDS

The following index provides general information about all watersheds represented in the ARS Water Data Bank. It can be used specifically as a cross-reference of watershed identification codes employed in the ARS Water Data Bank and at the Watershed Research Centers. Most of the variables in the index are self-explanatory. The effective date is in the second title line. For more current information, refer to the **IDENT** procedure in Chapter 4 (p. 18). The "WS ID" column in the index consists of a location number (two digits) and a watershed number (three digits). The word "PRESENT" under "PERIOD FOR ACREAGE" implies that the watershed is currently being monitored. A column titled "AVAIL" provides beginning and ending years for runoff data accessible through **REPHLEX** procedures. Latitude and longitude are given in degrees, minutes, and seconds under "LAT" and "LONG."

INDEX TO INFORMATION ON EXPERIMENTAL AGRICULTURAL WATERSHEDS

12/29/82 WATER DATA LABORATORY

WS ID	LOCATION		WS NAME	ACRES	PERIOD FOR ACREAGE	AVAIL	LAT	LONG
08002	VERO BEACH	FL	W-2	63100.	07/01/55 12/31/59	1955-1976	271703	804921
				63170.	01/01/60 12/31/66			
				66880.	01/01/67 PRESENT			
08003	VERO BEACH	FL	W-3	10000.	07/01/55 12/31/59	1955-1976	272324	805342
				10050.	01/01/60 12/31/66			
				12224.	01/01/67 PRESENT			
08005	VERO BEACH	FL	W-5	22656.	01/01/64 12/31/75	1964-1976	271840	805344
				20992.	01/01/76 PRESENT			
09001	AMERICUS	GA	W-1	17.9	08/01/38 12/31/38	1938-1943	320852	841830
				23.5	01/01/39 06/30/42			
				22.8	07/01/42 05/31/43			
09002	AMERICUS	GA	W-II	42.8	08/01/38 03/31/42	1938-1942	321137	842015
09003	AMERICUS	GA	W-III	32.0	08/01/38 02/28/42	1938-1942	321100	842015
09004	AMERICUS	GA	W-IV	59.2	08/01/38 04/30/43	1938-1943	321308	842148
10001	WATKINSVILLE	GA	W-1	19.2	09/01/39 PRESENT	1945-1980	335338	832530
10011	WATKINSVILLE	GA	P-1	6.67	01/01/72 12/31/75	1972-1975	335315	832515
10012	WATKINSVILLE	GA	P-2	3.21	01/01/73 12/31/75	1973-1975	335305	832538
10013	WATKINSVILLE	GA	P-3	3.11	01/01/72 12/31/75	1972-1975	335208	832710
10014	WATKINSVILLE	GA	P-4	3.41	01/01/73 12/31/75	1973-1975	335212	832710
13006	BLACKSBURG	VA	T.C.	3054.	06/01/57 12/31/69	1957-1969	370557	804434
13007	BLACKSBURG	VA	C.C.	786.	08/01/57 PRESENT	1957-1972	370756	802730
13008	BLACKSBURG	VA	B.C.	893.	08/01/57 PRESENT	1957-1972	370245	801643
13009	BLACKSBURG	VA	P.C.	182.	01/01/58 12/31/69	1958-1969	363452	791118
13010	BLACKSBURG	VA	L.W.C.	1471.	01/01/58 12/31/74	1958-1972	363518	790519
13011	BLACKSBURG	VA	R.R.B.	555.	04/01/58 PRESENT	1958-1972	364354	775441
13012	BLACKSBURG	VA	P.M.B.	192.	06/01/58 12/31/69	1958-1969	382705	775723
13013	BLACKSBURG	VA	C.R.	2023.	10/01/59 12/31/69	1959-1969	383430	782715
13014	BLACKSBURG	VA	F.C.	389.	09/01/60 12/31/69	1960-1969	375748	781112
13015	BLACKSBURG	VA	C.B.	1058.	09/01/60 PRESENT	1960-1972	372206	792310
16006	KLINGERSTOWN	PA	WE-38	1773.	01/01/68 PRESENT	1968-1975	404216	763516

WS ID	LOCATION		WS NAME	ACRES	PERIOD FOR ACREAGE		AVAIL	LAT	LONG
17001	EDWARDSVILLE	IL	W-1	27.22	03/01/38	12/31/55	1938-1955	385245	895414
17002	EDWARDSVILLE	IL	W-2	49.95	03/01/38	12/31/55	1938-1954	385245	895424
17003	EDWARDSVILLE	IL	W-3	12.55	03/01/38	12/31/42	1938-1942	385227	895408
17004	EDWARDSVILLE	IL	W-4	289.8	03/01/38	12/31/55	1938-1955	385242	895427
22003	AMES	IA	FOURMI C	12.48	01/01/76	12/31/78	1976-1978	421454	923800
22004	AMES	IA	FOURMI C	15.74	01/01/76	12/31/78	1976-1978	421454	923802
22005	AMES	IA	FOURMI C	14.65	01/01/76	12/31/78	1976-1978	421248	923342
22006	AMES	IA	FOURMI C	701.85	01/01/76	12/31/78	1976-1978	421506	924236
22007	AMES	IA	FOURMI C	368.22	01/01/76	12/31/78	1976-1978	421448	923812
25001	MCCREDIE	MO	S.R.W.	154.	01/01/41	PRESENT	1941-1978	385654	915437
26001	COSHOCTON	OH	102	1.26	04/01/37	12/31/46	1937-1981	402225	814741
				1.26	01/01/57	12/31/57			
				1.26	04/01/60	PRESENT			
26002	COSHOCTON	OH	104	1.33	04/01/37	12/31/46	1937-1981	402224	814741
				1.33	01/01/69	12/31/78			
26003	COSHOCTON	OH	129	2.71	04/01/38	12/31/72	1938-1981	402219	814752
				2.71	01/01/74	12/31/78			
26004	COSHOCTON	OH	135	2.69	04/01/38	12/31/69	1938-1981	402220	814748
				2.69	01/01/74	12/31/78			
26005	COSHOCTON	OH	130	1.63	05/01/38	12/31/71	1938-1981	402213	814758
26006	COSHOCTON	OH	107	2.59	09/01/38	12/31/46	1939-1946	402128	814757
26007	COSHOCTON	OH	131	2.21	05/01/38	12/31/69	1939-1981	402208	814812
				2.21	01/01/75	PRESENT			
26008	COSHOCTON	OH	132	0.59	05/01/48	12/31/68	1948-1969	402158	814815
				0.62	01/01/69	12/31/69			
26009	COSHOCTON	OH	134	0.92	05/01/38	06/30/47	1938-1947	402211	814826
26010	COSHOCTON	OH	123	1.37	01/01/39	PRESENT	1939-1981	402223	814720
26011	COSHOCTON	OH	115	1.61	04/01/39	12/31/70	1939-1970	402222	814712
26012	COSHOCTON	OH	127	1.65	05/01/49	12/31/70	1949-1970	402229	814728
26013	COSHOCTON	OH	109	1.69	11/01/38	PRESENT	1938-1981	402211	814739
26014	COSHOCTON	OH	103	0.65	04/01/39	12/31/70	1939-1981	402156	814749
				0.65	01/01/76	PRESENT			
26015	COSHOCTON	OH	110	1.27	04/01/39	12/31/70	1939-1981	402154	814742
				1.27	01/01/74	PRESENT			

INDEX TO INFORMATION ON EXPERIMENTAL AGRICULTURAL WATERSHEDS

WS ID	LOCATION	WS NAME	ACRES	PERIOD FOR ACREAGE	AVAIL	LAT	LONG
26016	COSHOCTON OH	113	1.45	09/01/39 12/31/73	1939-1976	402204	814650
			1.45	01/01/75 12/31/76			
26017	COSHOCTON OH	118	1.96	01/01/40 12/31/73	1940-1976	402153	814714
			1.96	01/01/75 12/31/76			
26018	COSHOCTON OH	111	1.18	04/01/39 12/31/70	1939-1970	402204	814656
26019	COSHOCTON OH	121	1.42	04/01/39 12/31/70	1939-1981	402139	814802
			1.42	01/01/72 12/31/72			
			1.42	01/01/74 PRESENT			
26020	COSHOCTON OH	106	1.56	04/01/39 12/31/72	1940-1981	402143	814756
			1.56	01/01/74 PRESENT			
26021	COSHOCTON OH	188	2.05	09/01/39 12/31/70	1939-1970	402127	814741
26023	COSHOCTON OH	185	7.40	09/01/39 12/31/70	1939-1972	402131	814747
			7.40	01/01/72 12/31/72			
26024	COSHOCTON OH	187	7.20	01/01/41 12/31/70	1941-1972	402130	814724
			7.20	01/01/72 12/31/72			
26025	COSHOCTON OH	192	7.59	09/01/39 12/30/70	1939-1981	402140	814752
			7.59	01/01/74 PRESENT			
26026	COSHOCTON OH	172	43.6	02/01/39 12/31/71	1939-1979	402156	814816
			43.6	01/01/75 PRESENT			
26027	COSHOCTON OH	169	29.0	01/01/40 12/31/69	1940-1969	402128	814808
26028	COSHOCTON OH	177	75.6	01/01/40 12/31/70	1940-1970	402158	814756
26029	COSHOCTON OH	183	74.2	03/01/38 12/31/63	1939-1963	402131	814657
26030	COSHOCTON OH	196	303.	05/01/37 PRESENT	1937-1981	402138	814707
26031	COSHOCTON OH	10	122.	01/01/38 12/31/71	1938-1971	402329	814840
26032	COSHOCTON OH	5	349.	01/01/38 12/31/71	1938-1971	402435	814808
26033	COSHOCTON OH	92	920.	01/01/38 12/31/71	1938-1971	402403	814756
26034	COSHOCTON OH	94	1520.	01/01/38 12/31/71	1938-1971	402328	814826
26035	COSHOCTON OH	95	2570.	01/01/38 12/31/72	1938-1972	402300	814905
26036	COSHOCTON OH	97	4580.	01/01/37 12/31/71	1937-1971	402146	815021
26038	COSHOCTON OH	174	52.8	06/01/60 12/31/77	1960-1981	402150	814732
26039	COSHOCTON OH	194	187.	01/01/60 12/31/75	1960-1981	402147	814723
			187.	01/01/77 12/31/77			
26040	COSHOCTON OH	182	69.6	01/01/64 12/31/70	1964-1981	402136	814655
			69.6	01/01/74 PRESENT			
26041	COSHOCTON OH	166	79.2	01/01/67 12/31/72	1967-1981	402157	814757
			79.2	01/01/75 PRESENT			

WS ID	LOCATION		WS NAME	ACRES	PERIOD FOR ACREAGE	AVAIL	LAT	LONG
26042	COSHOCTON	OH	20	373.	01/01/42 12/31/42	1942-1971	402209	814956
				373.	01/01/66 12/31/71			
26711	COSHOCTON	OH	11	293.	01/01/38 12/31/71	1938-1971	402315	814855
26719	COSHOCTON	OH	19	15.	01/01/69 12/31/73	1969-1973	402213	814845
26791	COSHOCTON	OH	91	79.2	01/01/38 12/31/71	1938-1971	402422	814741
26828	COSHOCTON	OH	128	2.68	01/01/39 12/31/47	1939-1972	402137	814739
				2.68	01/01/50 12/31/50			
				2.68	01/01/54 12/31/54			
				2.68	01/01/58 12/31/72			
26863	COSHOCTON	OH	163	.42	01/01/68 12/31/72	1968-1972	402215	814749
26891	COSHOCTON	OH	191	1.20	01/01/39 12/31/46	1939-1981	402130	814745
				1.20	01/01/48 12/31/48			
				1.20	01/01/52 12/31/54			
				1.20	01/01/56 12/31/57			
				1.20	01/01/60 12/31/72			
31001	FENNIMORE	WI	W-1	330.	07/01/38 12/31/69	1938-1969	425939	903904
31002	FENNIMORE	WI	W-2	22.8	07/01/38 12/31/68	1938-1968	425954	903927
31003	FENNIMORE	WI	W-3	52.5	07/01/38 12/31/69	1938-1969	425947	903913
31004	FENNIMORE	WI	W-4	171.	06/01/38 12/31/68	1938-1968	425949	903935
34001	CHEROKEE	OK	W-1	2.23	01/01/42 06/30/60	1942-1960	364400	982306
34002	CHEROKEE	OK	W-2	4.82	01/01/42 06/30/60	1942-1960	364400	982306
34006	CHEROKEE	OK	W-6	1.75	01/01/42 06/30/60	1942-1960	364400	982306
34007	CHEROKEE	OK	W-7	1.99	01/01/42 06/30/60	1942-1960	364400	982306
34008	CHEROKEE	OK	W-8	4.72	04/01/41 06/30/55	1942-1960	364400	982306
				4.72	07/01/56 08/31/60			
34013	CHEROKEE	OK	W-13	1.99	07/01/60 12/31/67	1960-1967	364400	982306
35001	GUTHRIE	OK	W-1	35.40	01/01/32 12/31/39	1939-1948	354912	972318
				33.40	01/01/40 12/31/53			
35002	GUTHRIE	OK	W-2	3.21	01/01/31 12/31/51	1939-1948	354912	972318
35003	GUTHRIE	OK	W-3	3.13	01/01/30 12/31/51	1941-1948	354912	972318
35004	GUTHRIE	OK	W-4	5.62	01/01/31 12/31/53	1940-1948	354912	972318
35005	GUTHRIE	OK	W-5	5.28	01/01/31 12/31/47	1939-1947	354912	972318
35006	GUTHRIE	OK	W-I	2.50	01/01/37 12/31/53	1942-1948	354912	972318

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35007	GUTHRIE	OK	W-II	5.09	01/01/42 12/31/55	1942-1948	354912	972318
35008	GUTHRIE	OK	W-III	9.09	01/01/42 12/31/53	1942-1948	354912	972318
35009	GUTHRIE	OK	W-IV	13.4	01/01/42 12/31/53	1942-1948	354912	972318
35010	GUTHRIE	OK	W-V	15.7	01/01/42 12/31/53	1942-1948	354912	972318
35011	GUTHRIE	OK	W-VI	94.8	01/01/42 12/31/55	1942-1948	354912	972318
37001	STILLWATER	OK	W-1	16.7	07/01/51 PRESENT	1959-1979	362100	970400
37002	STILLWATER	OK	W-3	92.	07/01/51 PRESENT	1959-1979	362100	970400
37003	STILLWATER	OK	W-4	206.	07/01/51 12/31/72	1958-1972	362100	970400
42002	RIESEL	TX	C	579.	02/01/38 06/30/43	1968-1978	313111	965334
				579.	03/01/49 PRESENT			
42003	RIESEL	TX	D	1110.	12/01/37 06/30/43	1968-1978	313038	965322
				1110.	03/01/49 PRESENT			
42004	RIESEL	TX	G	4380.	01/01/38 06/30/43	1968-1978	312859	965206
				4380.	07/01/57 PRESENT			
42006	RIESEL	TX	W-1	176.	07/01/37 12/31/68	1968-1978	312727	965248
				174.	01/01/69 PRESENT			
42007	RIESEL	TX	W-2	130.	07/01/37 PRESENT	1968-1978	312719	965255
42008	RIESEL	TX	W-6	42.3	05/01/39 06/30/43	1968-1978	312724	965311
				42.3	01/01/46 PRESENT			
42010	RIESEL	TX	W-10	19.7	08/01/38 PRESENT	1968-1978	312712	965300
42011	RIESEL	TX	Y	309.	05/01/37 06/30/43	1968-1978	312836	965236
				309.	05/01/46 PRESENT			
42012	RIESEL	TX	Y-2	132.	01/01/39 PRESENT	1968-1978	312830	965246
42013	RIESEL	TX	Y-4	79.9	01/01/39 06/30/43	1968-1968	312830	965254
				79.9	01/01/46 12/31/68			
42014	RIESEL	TX	Y-6	20.90	01/01/39 06/30/43	1968-1978	312826	965309
				20.90	05/01/47 12/31/55			
				16.3	01/01/56 PRESENT			
42015	RIESEL	TX	Y-7	40.	01/01/39 06/30/43	1968-1975	312808	965249
				40.	05/01/47 PRESENT			
42016	RIESEL	TX	Y-8	20.8	03/01/39 06/30/43	1968-1978	312822	965254
				20.8	01/01/49 PRESENT			
42017	RIESEL	TX	Y-10	21.0	07/01/38 07/31/43	1968-1978	312831	965310
				21.0	05/01/46 12/31/55			
				18.6	01/01/56 PRESENT			

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42023	RIESEL	TX	SW-11	3.23	03/01/38 06/30/43	1969-1978	312802	965304
				2.66	07/01/69 PRESENT			
42024	RIESEL	TX	SW-12	2.97	01/01/38 06/30/43	1968-1978	312848	965259
				2.90	06/01/47 PRESENT			
42028	RIESEL	TX	SW-17	2.99	02/01/39 06/30/43	1968-1978	312745	965314
				2.99	01/01/48 PRESENT			
42031	RIESEL	TX	P-1	.24	01/01/38 06/30/43	1968-1968	312725	965235
				.24	01/01/60 06/01/68			
42032	RIESEL	TX	P-2	.24	01/01/38 06/30/43	1968-1968	312724	965234
				.24	01/01/60 06/01/68			
42033	RIESEL	TX	P-3	.24	01/01/38 06/30/43	1968-1968	312723	965233
				.24	01/01/60 06/01/68			
42034	RIESEL	TX	P-4	.24	01/01/38 06/01/43	1968-1968	312722	965232
				.24	01/01/60 60/01/68			
42035	RIESEL	TX	SW-19	3.25	01/01/70 PRESENT	1970-1978	312835	965349
42036	RIESEL	TX	SW-20	3.21	01/01/70 PRESENT	1970-1978	312833	965344
42037	RIESEL	TX	Y-13	11.3	01/01/69 PRESENT	1969-1978	312836	965239
42038	RIESEL	TX	Y-14	5.6	01/01/69 PRESENT	1969-1978	312811	965255
42039	RIESEL	TX	W-12	9.9	01/01/69 PRESENT	1969-1978	312756	965307
42040	RIESEL	TX	W-13	11.3	01/01/69 PRESENT	1969-1978	312757	965308
44001	HASTINGS	NE	W-3	481.	08/01/38 12/31/67	1939-1967	401547	982231
44002	HASTINGS	NE	W-5	411.	07/01/39 12/31/67	1939-1967	401441	982148
44003	HASTINGS	NE	W-8	2086.	01/01/38 12/31/67	1938-1967	401351	982241
44004	HASTINGS	NE	W-11	3490.	01/01/39 12/31/67	1939-1967	401251	982201
44005	HASTINGS	NE	1-H	3.62	03/01/39 12/31/67	1939-1967	401602	982208
44006	HASTINGS	NE	2-H	3.40	03/01/39 12/31/54	1939-1967	401554	982212
				3.40	01/01/58 12/31/67			
44007	HASTINGS	NE	3-H	3.95	03/01/39 12/31/58	1939-1967	401550	982224
				3.77	01/01/59 12/31/67			
44008	HASTINGS	NE	4-H	3.84	04/01/39 12/31/54	1939-1967	401556	982224
				3.84	01/01/58 12/31/58			
				3.64	01/01/59 12/31/67			
44009	HASTINGS	NE	5-H	3.93	04/01/39 12/31/56	1939-1967	401600	982227
				3.93	01/01/58 12/31/58			
				4.02	01/01/59 12/31/67			

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44010	HASTINGS	NE	6-H	4.16	04/01/39 12/31/56	1939-1967	401604	982227
				4.16	01/01/58 12/31/58			
				4.01	01/01/59 12/31/67			
44011	HASTINGS	NE	7-H	4.15	04/01/39 12/31/56	1939-1967	401606	982226
				4.15	01/01/58 12/31/58			
				4.26	01/01/59 12/31/67			
44012	HASTINGS	NE	8-H	3.93	03/01/39 01/04/55	1939-1967	401606	982217
				3.93	01/01/58 12/31/58			
				3.97	01/01/59 12/31/67			
44013	HASTINGS	NE	9-H	3.78	04/01/39 12/31/54	1939-1954	401551	982239
44014	HASTINGS	NE	10-H	3.98	04/01/39 12/31/54	1939-1954	401558	982243
44015	HASTINGS	NE	11-H	3.85	04/01/39 12/31/54	1939-1954	401555	982249
44016	HASTINGS	NE	12-H	3.66	04/01/39 12/31/54	1939-1954	401554	982251
44017	HASTINGS	NE	13-H	3.41	04/01/39 12/31/54	1939-1954	401540	982301
45001	SAFFORD	AZ	W-I	519.3	06/01/39 12/31/69	1939-1969	325026	1093130
45002	SAFFORD	AZ	W-II	682.4	01/01/39 12/31/69	1939-1969	325020	1100012
45003	SAFFORD	AZ	W-IV	764.	01/01/39 12/31/69	1939-1969	323722	1093642
45004	SAFFORD	AZ	W-V	723.	01/01/39 12/31/69	1939-1969	322522	1093930
47001	ALBUQUERQUE	NM	W-I	246.	08/01/39 12/31/69	1939-1969	351042	1070130
47002	ALBUQUERQUE	NM	W-II	40.1	08/01/39 12/31/69	1939-1969	351100	1070118
47003	ALBUQUERQUE	NM	W-III	155.	07/01/39 12/31/46	1939-1969	351124	1070124
				183.	01/01/47 12/31/56			
				168.3	01/01/57 12/31/64			
				176.	07/01/65 12/31/69			
56001	MOSCOW	ID	W-1	146.8	11/01/37 12/31/42	1937-1942	464620	1165639
56002	MOSCOW	ID	W-2	177.9	11/01/37 12/31/44	1937-1944	464638	1170000
56003	MOSCOW	ID	ROCKMAIN	53.11	12/07/76 07/05/79	1976-1979		
56004	MOSCOW	ID	ROCKCHCK	2.22	12/07/76 07/05/79	1976-1979		
61001	MONTICELLO	IL	IA	82.	07/01/49 12/31/81	1949-1981		
61002	MONTICELLO	IL	IB	45.5	09/01/49 12/31/81	1949-1981		
61003	MONTICELLO	IL	W1	390.0	12/08/51 08/19/79	1951-1979		
61004	MONTICELLO	IL	W2	63.0	04/11/50 12/03/78	1950-1978		

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61011	MONTICELLO	IL	IA1	30.5	07/01/49 12/31/81	1980-1981		
61012	MONTICELLO	IL	IB1	33.0	09/01/49 12/31/81	1980-1981		
61021	MONTICELLO	IL	IA2	18.2	07/01/49 12/31/81	1980-1981		
61022	MONTICELLO	IL	IB2	25.0	09/01/49 12/31/81	1981-1981		
61031	MONTICELLO	IL	IA3	3.9	07/01/49 12/31/81	1980-1981		
62001	OXFORD	MS	W-4	2000.	01/01/57 12/31/64	1969-1974	344228	892939
				1580.	01/01/65 PRESENT			
62002	OXFORD	MS	W-5	1130.	01/01/57 09/30/69	1969-1974	344155	893044
				1000.	10/01/69 PRESENT			
62003	OXFORD	MS	W-10	5530.	01/01/57 PRESENT	1969-1971	344141	893610
62004	OXFORD	MS	W-12	22800.	01/01/57 PRESENT	1969-1971	344200	893220
62005	OXFORD	MS	W-17	32100.	01/01/57 PRESENT	1969-1974	344511	893454
62007	OXFORD	MS	W-24	511.	01/01/57 12/31/61	1969-1971	344548	893454
				512.	01/01/62 PRESENT			
62008	OXFORD	MS	W-28	1080.	01/01/57 PRESENT	1969-1971	344406	892724
62010	OXFORD	MS	W-32	20000.	01/01/57 PRESENT	1969-1974	344256	893730
62011	OXFORD	MS	W-34	75000.	01/01/57 12/31/69	1969-1974	344534	894145
				75000.	01/01/71 PRESENT			
62012	OXFORD	MS	W-35	7550.	01/01/57 12/31/77	1969-1971	343909	893810
62014	OXFORD	MS	WC-2	1.45	01/01/58 12/31/72	1965-1972		
62017	OXFORD	MS	W-17A	3200.	01/01/57 PRESENT	1969-1971	344548	894325
62018	OXFORD	MS	W-35A	1090.	01/01/57 PRESENT	1969-1971	343915	893818
63001	TOMBSTONE	AZ	W-1	36900.	01/01/54 12/31/74	1968-1974	314445	1100910
63002	TOMBSTONE	AZ	W-2	28100.	01/01/54 12/31/74	1968-1974	314405	1100555
63003	TOMBSTONE	AZ	W-3	2220.	05/01/54 12/31/74	1968-1974	314357	1100325
63004	TOMBSTONE	AZ	W-4	560.	06/01/54 12/31/74	1968-1974	314419	1100240
63005	TOMBSTONE	AZ	W-5	5510.	01/01/54 12/31/73	1968-1973		
63006	TOMBSTONE	AZ	W-6	23500.	01/01/62 12/31/74	1968-1974	314355	1100305
63007	TOMBSTONE	AZ	6307	3340.	06/01/66 12/31/74	1968-1974	314402	1100555
63008	TOMBSTONE	AZ	6308	3830.	07/31/63 12/31/74	1968-1974	314323	1100239
63009	TOMBSTONE	AZ	6309	5830.	01/01/68 12/31/74	1968-1974	314308	1100130
63010	TOMBSTONE	AZ	6310	4110.	01/01/68 12/31/74	1968-1974	314315	1100123
63011	TOMBSTONE	AZ	6311	2035.	01/01/63 12/31/74	1968-1974	314428	1095940
63015	TOMBSTONE	AZ	6315	5912.	06/01/65 12/31/74	1968-1974	314246	1100225

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63101	TOMBSTONE	AZ	63101	2.8	01/01/62	PRESENT	1962-1976	314430	1100315
63102	TOMBSTONE	AZ	63102	3.9	01/01/63	PRESENT	1963-1976	314430	1100315
63103	TOMBSTONE	AZ	63103	8.30	07/01/63	PRESENT	1963-1976	314430	1100315
63104	TOMBSTONE	AZ	63104	11.0	01/01/63	PRESENT	1963-1976	314430	1100315
63105	TOMBSTONE	AZ	63105	.56	01/01/65	PRESENT	1965-1976	314430	1100315
63106	TOMBSTONE	AZ	63106	1.7	01/01/65	PRESENT	1965-1976	314430	1100315
63112	TOMBSTONE	AZ	63112	4.6	01/01/62	PRESENT	1962-1975	314410	1095640
64001	SANTA ROSA	NM	W-1	42880.	01/01/55	04/01/79	1955-1978	345153	1041223
66001	MOOREFIELD	WV	W-1	8.25	01/01/58	12/31/61	1958-1967	390245	790245
				8.57	01/01/62	12/31/67			
66002	MOOREFIELD	WV	W-2	10.06	01/01/58	12/31/61	1958-1967	390250	790230
				9.73	01/01/62	12/31/67			
66004	MOOREFIELD	WV	W-4	6.32	06/01/58	12/31/67	1958-1967	390253	790155
66005	MOOREFIELD	WV	W-5	9.55	06/01/58	12/31/67	1958-1967	390253	790149
67001	N. DANVILLE	VT	W-1	10611.20	10/01/58	12/31/76	1958-1973	442700	720406
67002	N. DANVILLE	VT	W-2	146.	09/01/58	10/11/78	1961-1971	442732	720539
67003	N. DANVILLE	VT	W-3	2067.	01/01/60	PRESENT	1960-1979	442835	720733
67004	N. DANVILLE	VT	W-4	10752.	01/01/60	12/31/74	1960-1973	442727	720346
67005	N. DANVILLE	VT	W-5	27469.	01/01/60	05/16/79	1960-1973	442604	720222
67006	N. DANVILLE	VT	W-6	168.	01/01/68	12/31/75	1968-1971	442843	720625
67007	N. DANVILLE	VT	W-7	5389.	01/01/61	12/31/76	1961-1972	442729	720600
67008	N. DANVILLE	VT	W-8	3866.	01/01/61	05/16/79	1961-1979	442738	720546
67009	N. DANVILLE	VT	W-9	116.	01/01/61	07/15/78	1961-1973	442926	720948
67010	N. DANVILLE	VT	W-10	4032.	01/01/63	12/31/75	1963-1973	442640	720345
67011	N. DANVILLE	VT	W-11	562.	01/01/64	12/31/75	1964-1972	442700	720245
67012	N. DANVILLE	VT	W-12	502.	01/01/64	12/31/75	1964-1972	442715	720412
67013	N. DANVILLE	VT	W-13	254.	01/01/65	12/31/75	1965-1972	442814	720621
67014	N. DANVILLE	VT	W-14	915.	01/01/65	12/31/75	1965-1972	442818	720624
67016	N. DANVILLE	VT	W-16	736.	01/01/65	12/31/75	1965-1967	442841	720731
68001	REYNOLDS	ID	W-1	57700.	01/01/63	PRESENT	1963-1975	431549	1164510
68002	REYNOLDS	ID	W-2	8990.	01/01/64	PRESENT	1964-1975	431521	1164510
68003	REYNOLDS	ID	W-3	7846.	01/01/65	PRESENT	1965-1975	431442	1164530

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68004	REYNOLDS	ID	W-4	13453.	01/01/66 PRESENT	1966-1975	430833	1164542
68011	REYNOLDS	ID	W-11	306.	01/01/67 12/31/78	1967-1975	431524	1164901
68012	REYNOLDS	ID	W-12	205.	01/01/67 12/31/77	1967-1975	431430	1164245
68013	REYNOLDS	ID	W-13	100.	01/01/63 PRESENT	1963-1975	430416	1164527
68014	REYNOLDS	ID	W-14	33.	01/01/67 PRESENT	1967-1975	430853	1164414
68015	REYNOLDS	ID	W-15	126.	01/01/65 PRESENT	1965-1975	430416	1164517
68016	REYNOLDS	ID	W-16	3482.	01/01/73 PRESENT	1973-1975	430726	1164625
68021	REYNOLDS	ID	W-21	63.4	01/01/70 12/31/76	1970-1975	430726	1164338
68022	REYNOLDS	ID	W-22	15.7	01/01/70 12/31/75	1970-1975	430700	1164330
68033	REYNOLDS	ID	W-33	350.	01/01/68 12/31/74	1968-1973	430930	1164010
68034	REYNOLDS	ID	W-34	2360.	01/01/68 12/31/74	1968-1973	430930	1164030
69001	CHICKASHA	OK	100	2339840.	10/01/61 12/31/79	1961-1977	350500	981400
69002	CHICKASHA	OK	200	2613000.	10/01/61 12/31/74	1961-1974	350500	980500
				273000.	10/01/61 12/31/74			
69004	CHICKASHA	OK	400	2725760.	10/01/61 12/31/68	1961-1966	350500	975600
				112910.	10/01/61 12/31/68			
69005	CHICKASHA	OK	500	2769920.	01/01/64 04/30/78	1964-1977	350500	975400
				43840.	01/01/64 04/30/78			
69006	CHICKASHA	OK	600	3011800.	08/01/63 12/31/72	1964-1970	345900	974800
				243050.	08/01/63 12/31/72			
69007	CHICKASHA	OK	700	3061100.	10/01/61 12/31/78	1961-1977	345500	974600
				50830.	10/01/61 12/31/78			
69008	CHICKASHA	OK	611	4845.	10/01/61 12/31/74	1961-1974	345700	975100
69009	CHICKASHA	OK	612	563.	10/01/61 12/31/74	1961-1974	355700	975100
69010	CHICKASHA	OK	111	16634.	10/01/62 04/30/78	1962-1977	350300	981500
69011	CHICKASHA	OK	131	25660.	09/01/62 04/30/78	1962-1977	350300	981000
69012	CHICKASHA	OK	411	33300.	09/01/62 12/31/74	1962-1974	350300	975800
69013	CHICKASHA	OK	511	38020.	10/01/62 12/31/78	1962-1977	350300	975100
69014	CHICKASHA	OK	110	25020.	04/01/63 04/30/78	1963-1977	350500	981100
69015	CHICKASHA	OK	522	132990.	05/01/63 PRESENT	1963-1977	345700	975700
69016	CHICKASHA	OK	512	22530.	08/01/63 04/30/78	1963-1977	350500	975000
69017	CHICKASHA	OK	621	21310.	10/01/63 PRESENT	1963-1977	350000	974600
69018	CHICKASHA	OK	121	131780.	10/01/63 12/31/74	1964-1974	351030	981530
69019	CHICKASHA	OK	513	12314.	01/01/64 04/30/78	1964-1977	350353	974913
69027	CHICKASHA	OK	311	15206.	01/01/66 04/30/78	1966-1977	350844	975730

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WS ID	LOCATION		WS NAME	ACRES	PERIOD FOR ACREAGE		AVAIL	LAT	LONG
69028	CHICKASHA	OK	515	1657.	01/01/72	PRESENT	1972-1977	350937	975106
69030	CHICKASHA	OK	C-1	17.83	01/01/65	12/31/76	1965-1976	350246	975439
69031	CHICKASHA	OK	C-2	38.10	05/01/62	06/14/64	1962-1974	350625	980234
				32.54	06/15/64	12/31/72			
				38.10	01/01/73	12/31/73			
				32.54	01/01/74	12/31/75			
69032	CHICKASHA	OK	C-3	44.26	09/01/65	12/31/76	1965-1976	350225	975413
69033	CHICKASHA	OK	C-4	29.93	09/01/65	12/31/76	1965-1976	350223	975413
69034	CHICKASHA	OK	C-5	12.75	05/01/65	12/31/76	1965-1976	350200	975433
69035	CHICKASHA	OK	C-6	13.0	05/01/65	12/31/76	1965-1976	350200	975434
69036	CHICKASHA	OK	C-7	26.52	05/01/65	12/31/76	1965-1976	350201	975438
69037	CHICKASHA	OK	C-8	27.28	04/01/65	12/31/76	1965-1976	350155	975425
69042	CHICKASHA	OK	R-5	23.72	07/01/66	12/31/78	1966-1978	350521	974725
69043	CHICKASHA	OK	R-6	27.22	07/01/66	12/31/78	1966-1978	350518	974720
69044	CHICKASHA	OK	R-7	19.19	07/01/66	07/31/78	1966-1978	350458	974727
69045	CHICKASHA	OK	R-8	27.55	07/01/66	07/31/78	1966-1978	350503	974711
69049	CHICKASHA	OK	R-9	9.3	01/01/71	07/31/78	1971-1978	350503	974731
70001	SONORA	TX	W-14	30720.	06/01/61	12/31/73	1968-1972	303412	1003836
70002	SONORA	TX	S-9	1774.	06/01/61	12/31/73	1968-1972	303948	1003342
70003	SONORA	TX	S-10	5392.	06/01/61	12/31/73	1968-1972	303748	1003512
70004	SONORA	TX	S-11	10787.	06/01/61	12/31/73	1968-1972	303624	1003618
70005	SONORA	TX	S-12	2801.	06/01/61	12/31/73	1968-1971	303530	1003700
70006	SONORA	TX	S-13	686.	06/01/61	12/31/73	1968-1972	303342	1003748
70007	SONORA	TX	W-1	10.2	10/01/63	12/31/75	1968-1972	301600	1003400
70008	SONORA	TX	W-2	8.6	01/01/65	12/31/75	1968-1972	301600	1003400
70009	SONORA	TX	W-3	6.7	01/01/65	12/31/75	1968-1972	301600	1003400
70010	SONORA	TX	W-4	4.5	01/01/66	12/31/75	1968-1972	301600	1003400
70011	SONORA	TX	W-5	7.2	01/01/66	12/31/75	1968-1972	301600	1003400
70012	SONORA	TX	W-6	6.9	01/01/66	12/31/75	1968-1972	301600	1003400
70013	SONORA	TX	W-7	12.2	01/01/65	12/31/73	1968-1972	304024	1003312
70014	SONORA	TX	W-8	7.98	01/01/72	12/31/72	1972-1972		
71001	TREYNOR	IA	W-1	74.5	01/01/64	PRESENT	1964-1978	410951	953830
71002	TREYNOR	IA	W-2	82.8	01/01/64	PRESENT	1964-1978	411010	953900
71003	TREYNOR	IA	W-3	107.	01/01/64	PRESENT	1964-1978	411236	953805

WS ID	LOCATION		WS NAME	ACRES	PERIOD FOR ACREAGE		AVAIL	LAT	LONG
71004	TREYNOR	IA	W-4	150.	01/01/64	PRESENT	1964-1978	411236	953805
71005	TREYNOR	IA	W-5	389.	01/01/63	12/31/73	1963-1973	411018	952655
72001	COTTONWOOD	SD	H-2	2.13	01/01/63	06/30/73	1968-1972		
72002	COTTONWOOD	SD	L-2	2.38	01/01/63	06/30/73	1968-1972		
72005	COTTONWOOD	SD	M-1	2.35	01/01/63	06/30/73	1968-1972		
73001	FORT STAUNTON	NM	7301	24.4	04/01/66	PRESENT	1967-1976	332747	1053138
73002	FORT STAUNTON	NM	7302	32.2	04/01/66	PRESENT	1967-1976	332753	1053133
74002	TIFTON	GA	W-TB	82624.00	01/01/69	PRESENT	1971-1980	312854	833503
74003	TIFTON	GA	W-TN	3872.00	01/01/68	PRESENT	1970-1980	313103	833511
74004	TIFTON	GA	W-TO	3936.60	01/01/68	PRESENT	1968-1980	313015	833432
74005	TIFTON	GA	W-TF	28403.80	01/01/68	PRESENT	1969-1980	313617	833753
74006	TIFTON	GA	W-TI	12358.00	01/01/68	PRESENT	1968-1980	314028	834126
74007	TIFTON	GA	W-TJ	5466.00	01/01/70	PRESENT	1968-1980	314132	834208
74008	TIFTON	GA	W-TK	4141.00	01/01/68	PRESENT	1968-1980	314147	834151
74009	TIFTON	GA	W-TM	672.00	01/01/68	PRESENT	1968-1980	314419	834328
75001	AHOSKIE	NC	W-A1	36480.	07/01/64	12/31/74	1968-1972	361654	770006
75002	AHOSKIE	NC	W-A2	15360.	07/01/64	12/31/74	1968-1972	361654	770954
75003	AHOSKIE	NC	W-A3	2368.	07/01/64	12/31/74	1968-1972	361448	771406
75004	AHOSKIE	NC	W-A4	1664.	07/01/64	12/31/74	1968-1972	361639	770048
77001	LAUPAHOEHOE	HI	W-1	2.05	01/01/72	12/31/73	1972-1978	195800	1551500
				1.52	01/01/74	12/31/78			
77003	WAIALUA	HI	W-3	7.02	01/01/72	12/31/78	1972-1977	213600	1580200
77006	KUNIA	HI	W-6	7.07	01/01/75	01/01/77	1975-1977	212500	1580400

APPENDIX B - SUMMARY OF THE ARS WATER DATA BANK

The following tables represent the data stored in the ARS Water Data Bank. The effective date of the report appears first. For more current information, refer to the **SPRDSHT** procedure in Chapter 4 (p. 46). Location number and name are in the next line. Rain gage identification codes and watershed numbers (as they appear in the ARS Water Data Bank files) are in the left column. Over the other columns are the years (1936-85). An "X" in the table indicates that data are stored in the S&R files (breakpoint) for that station and year and a "D" indicates that only daily values are available. An "X" or a "D" does not necessarily mean that data for a complete year are stored in the ARS Water Data Bank. Since stations typically are installed in midyear, data for the first year of a particular station may be incomplete.

L08 - VERO BEACH, FL

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000002 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000003 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000004 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000005 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
000006 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDXX.D    .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

7 RAINGAGES
14 STATION YEARS - BREAKPOINT
154 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
002 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDDD.D    .     .
003 .     .     .     .    D.DDDDD.DDDDD.DDDDD.DDDDD.D    .     .
005 .     .     .     .     .     .   DD.DDDDD.DDDDD.D    .     .
```

3 WATERSHEDS
0 STATION YEARS - BREAKPOINT
57 STATION YEARS - DAILY

L09 - AMERICUS, GA

```
            4     4     5     5     6     6     7     7     8     8
RG     ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .  XXX.XXX  .     .     .     .     .     .     .     .     .
000002 .  XXX.XX   .     .     .     .     .     .     .     .     .
000003 .  XXX.     .     .     .     .     .     .     .     .     .
000004 .  XXX.XX   .     .     .     .     .     .     .     .     .
000005 .  XXX.XXX  .     .     .     .     .     .     .     .     .
000006 .  XXX.XXX  .     .     .     .     .     .     .     .     .
          ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

6 RAINGAGES

31 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
WS     ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001    .  XXX.XXX  .     .     .     .     .     .     .     .     .
002    .  XXX.XX   .     .     .     .     .     .     .     .     .
003    .  XXX.XX   .     .     .     .     .     .     .     .     .
004    .  XXX.XXX  .     .     .     .     .     .     .     .     .
```

4 WATERSHEDS

22 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L10 - WATKINSVILLE, GA

```
            4     4     5     5     6     6     7     7     8     8
  RG    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000R01 .     .     .     .     .     .     .     . XXXX.     .     .
000R02 .     .     .     .     .     .     .     .  XXX.     .     .
000R03 .     .     .     .     .     .     .     . XXXX.     .     .
000R04 .     .     .     .     .     .     .     .  XXX.     .     .
000001 .     .    X.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXX  .     .
```

5 RAINGAGES 48 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001 .     .    X.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.     .
  011 .     .     .     .     .     .     .     . XXXX.     .     .
  012 .     .     .     .     .     .     .     .  XXX.     .     .
  013 .     .     .     .     .     .     .     . XXXX.     .     .
  014 .     .     .     .     .     .     .     .  XXX.     .     .
```

5 WATERSHEDS 50 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L13 - BLACKSBURG, VA

```
          4     4     5     5     6     6     7     7     8     8
RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
P04R01 .    .     .     .     . X   .     X.XXX .     .     .     .
P05R02 .    .     .     .     . XXXX.XXXXX.XXX  .     .     .     .
P06R03 .    .     .     .     . XXXX.XXXXX.XXX  .     .     .     .
P07R01 .    .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .     .
P08R02 .    .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .     .
P09R03 .    .     .     .     .     .   XX.XXXXX.XX   .     .     .
P10R04 .    .     .     .     .     .   XX.XXXXX.XX   .     .     .
P11R05 .    .     .     .     .     .     . X   .     .     .     .
P19R01 .    .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .     .
P20R02 .    .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .     .
P21R01 .    .     .     .     .     .     X.XXX .     .     .     .
P22R02 .    .     .     .     .  XXX.XXXXX.XXX  .     .     .     .
P23R01 .    .     .     .     .  XXX.XXXXX.XXXXX.XX   .     .     .
P24R02 .    .     .     .     .  XXX.XXXXX.XXXXX.XX   .     .     .
P25R03 .    .     .     .     .  XXX.XXXXX.XXXXX.XX   .     .     .
P26R01 .    .     .     .     .     .     X.XXXXX.XX   .     .     .
P27R02 .    .     .     .     .  XXX.XXXXX.XXXXX.XX   .     .     .
P28R01 .    .     .     .     .     .     X.XXX .     .     .     .
P29R02 .    .     .     .     .  XXX.XXXXX.XXX  .     .     .     .
P30R01 .    .     .     .     .   XX.XXXXX.XXX  .     .     .     .
P31R02 .    .     .     .     .   XX.XXXXX.XXX  .     .     .     .
P32R03 .    .     .     .     .   XX.XXXXX.XXX  .     .     .     .
P33R01 .    .     .     .     .    X.     X.XXX .     .     .     .
P34R02 .    .     .     .     .    X.XXXXX.XXX  .     .     .     .
P35R01 .    .     .     .     .    X.XXXXX.XXXXX.XX   .     .     .
P36R02 .    .     .     .     .    X.XXXXX.XXXXX.XX   .     .     .
P37R03 .    .     .     .     .    X.XXXXX.XXXXX.XX   .     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

27 RAINGAGES 293 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
006 .    .     .     .     . XXXX.XXXXX.XXXX .     .     .     .
007 .    .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .     .
008 .    .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .     .
009 .    .     .     .     .  XXX.XXXXX.XXXX .     .     .     .
010 .    .     .     .     .  XXX.XXXXX.XXXXX.XX   .     .     .
011 .    .     .     .     .  XXX.XXXXX.XXXXX.XX   .     .     .
012 .    .     .     .     .  XXX.XXXXX.XXXX .     .     .     .
013 .    .     .     .     .   XX.XXXXX.XXXX .     .     .     .
014 .    .     .     .     .    X.XXXXX.XXXX .     .     .     .
015 .    .     .     .     .    X.XXXXX.XXXXX.XX   .     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

10 WATERSHEDS 133 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L16 - KLINGERSTOWN, PA

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
00MB37 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.XX   .
00ME37 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.XX   .
000001 .     .     .     .     .     .     .    X.X XXX.XX   .     .
000002 .     .     .     .     .     .     .     . XXXX.XX   .     .
```

4 RAINGAGES — 43 STATION YEARS - BREAKPOINT; 0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  006 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
  010 .     .     .     .     .     .     .    X.XXXXX.X    .     .
  020 .     .     .     .     .     .     .    X.XXXXX.X    .     .
```

3 WATERSHEDS — 22 STATION YEARS - BREAKPOINT; 0 STATION YEARS - DAILY

L17 - EDWARDSVILLE, IL

```
            4     4     5     5     6     6     7     7     8     8
  RG    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .  XXX.XXXXX.XXXXX.XXXXX.     .     .     .     .     .     .
```

1 RAINGAGES — 18 STATION YEARS - BREAKPOINT; 0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
   WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
   001 .  XXX.XXXXX.XXXXX.XXXXX.     .     .     .     .     .     .
   002 .  XXX.XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
   003 .  XXX.XX   .     .     .     .     .     .     .     .     .
   004 .  XXX.XXXXX.XXXXX.XXXXX.     .     .     .     .     .     .
```

4 WATERSHEDS — 58 STATION YEARS - BREAKPOINT; 0 STATION YEARS - DAILY

L21 - IOWA CITY, IA

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .     .  XXX.XXXXX.XXXXX.XXXX .     .     .
```

1 RAINGAGES

17 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L22 - AMES, IA

```
            4     4     5     5     6     6     7     7     8     8
RG     ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .     .     .     . XXX.XX    .     .     .
000002 .     .     .     .     .     .     .  XX.XX    .     .     .
000003 .     .     .     .     .     .     .  XX.XX    .     .     .
000031 .     .     .     .     .     .     .     .     .XXXXX.     .
000032 .     .     .     .     .     .     .     .     .XXXXX.     .
000033 .     .     .     .     .     .     .     .     .XXXXX.     .
000034 .     .     .     .     .     .     .     .     .XXXXX.     .
000035 .     .     .     .     .     .     .     .     .XXXXX.     .
000036 .     .     .     .     .     .     .     .     .XXXXX.     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

9 RAINGAGES — 43 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
WS     ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
003    .     .     .     .     .     .     .     .     .XXXXX.     .
004    .     .     .     .     .     .     .     .     .XXXXX.     .
005    .     .     .     .     .     .     .     .     .XXXXX.     .
006    .     .     .     .     .     .     .     .     .XXXXX.     .
007    .     .     .     .     .     .     .     .     .XXXXX.     .
```

5 WATERSHEDS — 25 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L25 - MCCREDIE, MO

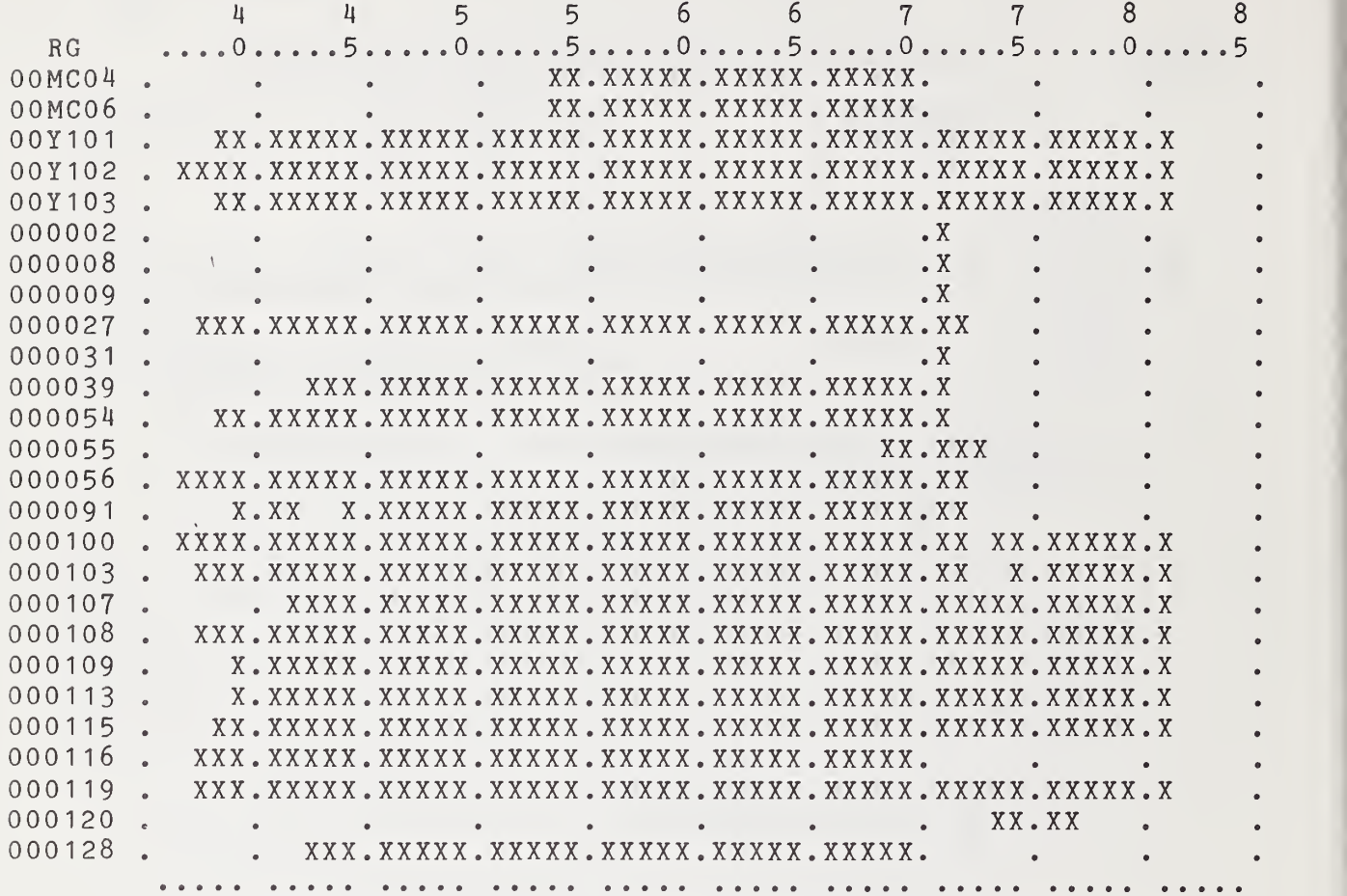
```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000004 .     .XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXX .     .     .
```

1 RAINGAGES 34 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

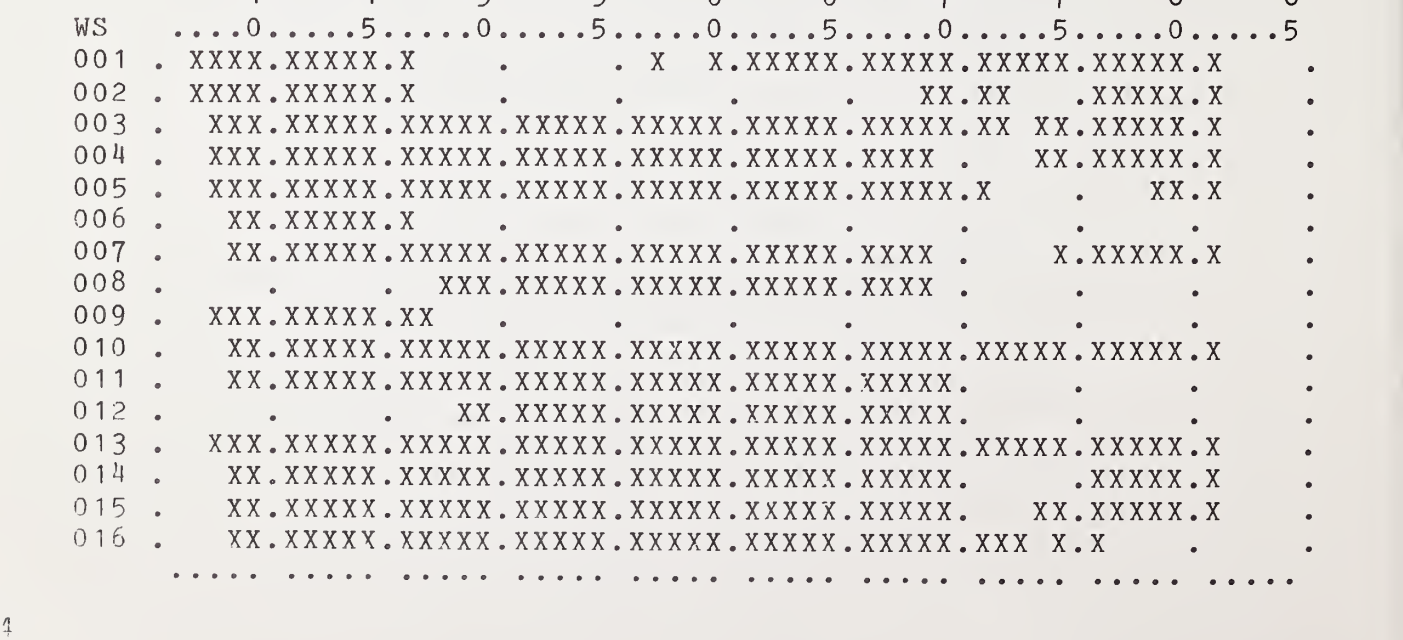
```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001 .     .XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXX  .     .
```

1 WATERSHEDS 38 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

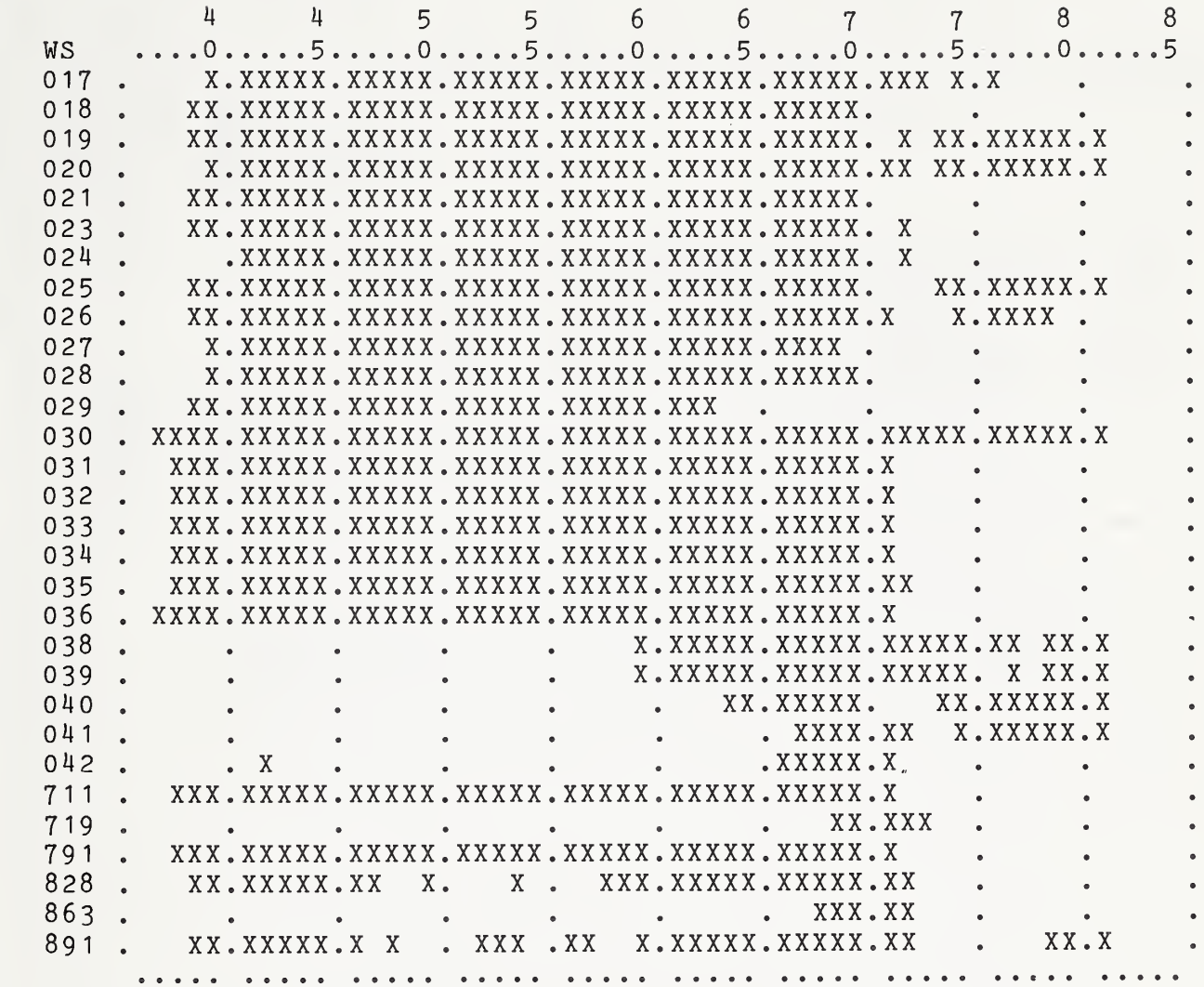
L26 - COSHOCTON, OH



26 RAINGAGES 744 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY



L26 - COSHOCTON, OH



46 WATERSHEDS 1,378 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L31 - FENNIMORE, WI

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000006 .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXX .     .     .     .
```

1 RAINGAGES 31 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001 .  XXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXX .     .     .     .
  002 .  X X.XXXXX. X XX.X XX .XX X .XX XX.X X  .     .     .     .
  003 .  X X.XXXXX. X XX.XX X . X X . X XX.XXXX .     .     .     .
  004 .  XXX.XXXXX. X XX.X  X .XX XX.XX XX.  X  .     .     .     .
```

4 WATERSHEDS 98 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L33 - BENTONVILLE, AR

```
            4     4     5     5     6     6     7     7     8     8
 RG    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .   XX.XXXXX.XX   .     .     .     .     .     .     .     .
000002 .  XXX.XXXXX.XX   .     .     .     .     .     .     .     .
000003 .   X . XXXX.XX   .     .     .     .     .     .     .     .
000005 .  XXX.XXXXX.XX   .     .     .     .     .     .     .     .
```

4 RAINGAGES — 36 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
 WS    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001 .  XXX.XXX  .     .     .     .     .     .     .     .     .
002 .  XXX.XXX  .     .     .     .     .     .     .     .     .
003 .   XX.XXX  .     .     .     .     .     .     .     .     .
004 .   XX.XXX  .     .     .     .     .     .     .     .     .
005 .   XX.XXX  .     .     .     .     .     .     .     .     .
006 .   XX.XXX  .     .     .     .     .     .     .     .     .
     ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

6 WATERSHEDS — 32 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L34 - CHEROKEE, OK

```
            4     4     5     5     6     6     7     7     8     8
  RG    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000G09 .     .XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .     .
```

1 RAINGAGES 27 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
   WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
   001 .     . XXXX.XXXXX.XXXXX.XXXXX.     .     .     .     .     .
   002 .     . XXXX.XXXXX.XXXXX. XXXX.     .     .     .     .     .
   006 .     . XXXX.XXXXX.XXXXX.XXXXX.     .     .     .     .     .
   007 .     . XXXX.XXXXX.XXXXX.XXXXX.     .     .     .     .     .
   008 .     . XXXX.XXXXX.XXXXX. XXXX.     .     .     .     .     .
   013 .     .     .     .     .    X.XXXXX.XX    .     .     .     .
        ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

6 WATERSHEDS 101 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L35 - GUTHRIE, OK

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000G12 . XXXX.XXXXX.XXXXX.XXXXX.X     .     .     .     .     .     .
```

1 RAINGAGES — 20 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001 .   XX.XXXXX.XXX  .     .     .     .     .     .     .     .
  002 .   XX.XXXXX.XXX  .     .     .     .     .     .     .     .
  003 .     .XXXXX.XXX  .     .     .     .     .     .     .     .
  004 .    X.XXXXX. XX  .     .     .     .     .     .     .     .
  005 .   XX.XXXXX.XX   .     .     .     .     .     .     .     .
  006 .     . XXXX.XXX  .     .     .     .     .     .     .     .
  007 .     . XXXX.XXX  .     .     .     .     .     .     .     .
  008 .     . XXXX.XXX  .     .     .     .     .     .     .     .
  009 .     . XXXX.XXX  .     .     .     .     .     .     .     .
  010 .     . XXXX.XXX  .     .     .     .     .     .     .     .
  011 .     . XXXX.XXX  .     .     .     .     .     .     .     .
      ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

11 WATERSHEDS — 87 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L37 - STILLWATER, OK

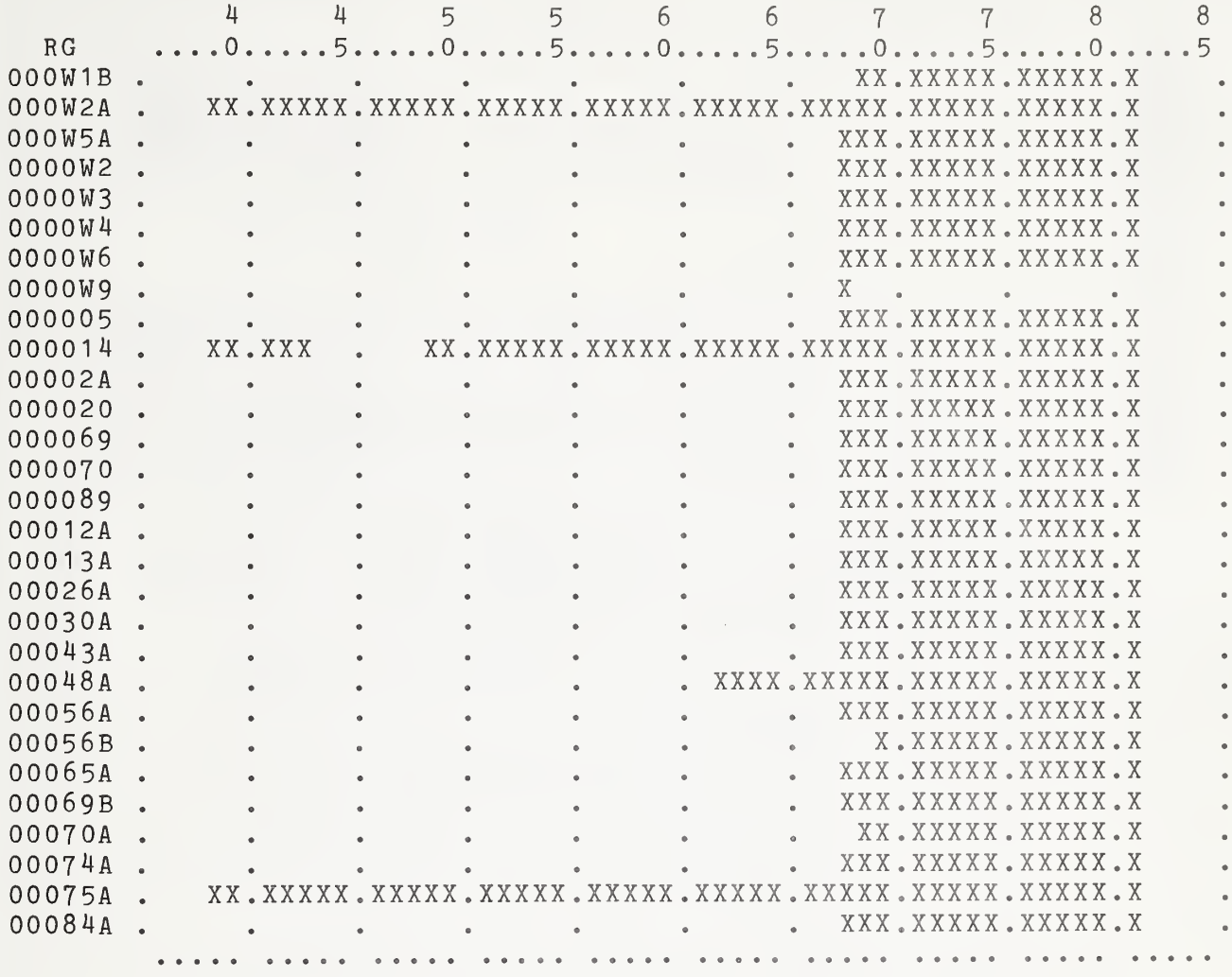
```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .     .     .     .   XX.XXXXX.XXXX .     .
000002 .     .     .     .     .     .     . XXX.XX    .     .     .
000003 .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXX .     .
000004 .     .     .     .XXXXX.XXXXX.XXXXX.XX XX.XX    .     .     .
```

4 RAINGAGES
65 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001 .     .     .     .     .   XX.XXXXX.XXXXX.XXXXX.XXXX .     .
  002 .     .     .     .     .   XX.XXXXX.XXXXX.XXXXX.XXXX .     .
  003 .     .     .     .     .  XXX.XXXXX.XXXXX.XX    .     .     .
```

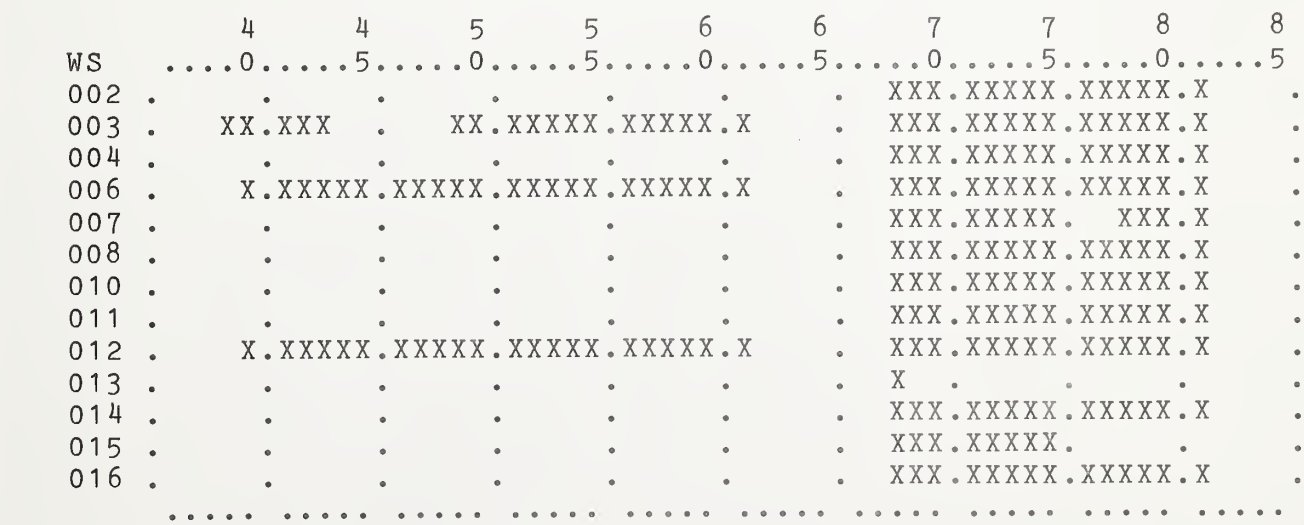
3 WATERSHEDS
57 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L42 - RIESEL, TX



29 RAINGAGES

477 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY



L42 - RIESEL, TX

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
017  .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.X    .
023  .     .     .     .     .     .     .   XX.XXXXX. XXXX.X    .
024  .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.X    .
028  .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.X    .
031  .     .     .     .     .     .     .  X   .     .     .    .
032  .     .     .     .     .     .     .  X   .     .     .    .
033  .     .     .     .     .     .     .  X   .     .     .    .
034  .     .     .     .     .     .     .  X   .     .     .    .
035  .     .     .     .     .     .     .    X.XXXXX.XXXXX.X    .
036  .     .     .     .     .     .     .    X.XXXXX.XXXXX.X    .
037  .     .     .     .     .     .     .   XX.XXXXX.XXXXX.X    .
038  .     .     .     .     .     .     .   XX.XXXXX. XXXX.X    .
039  .     .     .     .     .     .     .   XX.XXXXX.XXXXX.X    .
040  .     .     .     .     .     .     .   XX.XXXXX.XXXXX.X    .
     ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

27 WATERSHEDS

356 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L44 - HASTINGS, NE

```
                4     4     5     5     6     6     7     7     8     8
RG         ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
RGPA12  .      .     .     .     .     . XXXX.XX     .     .     .     .
RGPA31  .  XXX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .     .     .
RGPB10  .      .     .     .     .XXXXX.XXXXX.XX     .     .     .     .
RGPB23  .     .XXXXX.XXXXX.XXXXX.     .     .     .     .     .     .
RGPB25  .     .XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
RGPB28  .   XX.XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
RGPB31  .      .     .     .     .     . XXX.XX     .     .     .     .
RGPB32  .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .     .     .
RGPB33  .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .     .     .
RGPB34  .      .     .     .     .     .   XX.XX     .     .     .     .
RGPB36  .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
RGPB38  .   XX.XXXXX.XXXXX.XXXXX.     .     .     .     .     .     .
RGPB39  .      .     .     .     .     . XXX.XX     .     .     .     .
RGPC23  .   XX.XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
RGPC24  .   XX.XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
RGPC29  .  XX  .     .     .     .     .     .     .     .     .     .
RGPC31  .  XXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
RGPC40  .      .     .     .     .     . XXX.XX     .     .     .     .
RGPC43  .     .XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
RGPC45  .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .     .     .
RGPC58  .      .     .     .     .     .XXXXX.XX     .     .     .     .
RGPD31  .  XXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
RGPD45  .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
RGPD50  .      .     .     .    X.XXXXX.XX    .     .     .     .     .
RGPE30  .  XXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
RGPG42  .  XXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
RGPMET  .     . XXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
        ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

27 RAINGAGES

463 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
                4     4     5     5     6     6     7     7     8     8
WS         ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
002     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
003     .  XXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
004     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
005     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX     .     .     .     .
006     .   XX.XXXXX.XXXXX.XXXX  .  XXX.XXXXX.XX     .     .     .     .
007     .   XX.XXXXX.XXXXX.XXXX  .  XXX.XXXXX.XX     .     .     .     .
008     .   XX.XXXXX.XXXXX.XXXX  .  XXX.XXXXX.XX     .     .     .     .
009     .   XX.XXXXX.XXXXX.XXXXX.X XXX.XXXXX.XX     .     .     .     .
010     .   XX.XXXXX.XXXXX.XXXXX.X XXX.XXXXX.XX     .     .     .     .
011     .   XX.XXXXX.XXXXX.XXXXX.X XXX.XXXXX.XX     .     .     .     .
012     .   XX.XXXXX.XXXXX.XXXX  .  XXX.XXXXX.XX     .     .     .     .
013     .   XX.XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
014     .   XX.XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
015     .   XX.XXXXX.XXXXX.XXXX  .     .     .     .     .     .     .
        ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

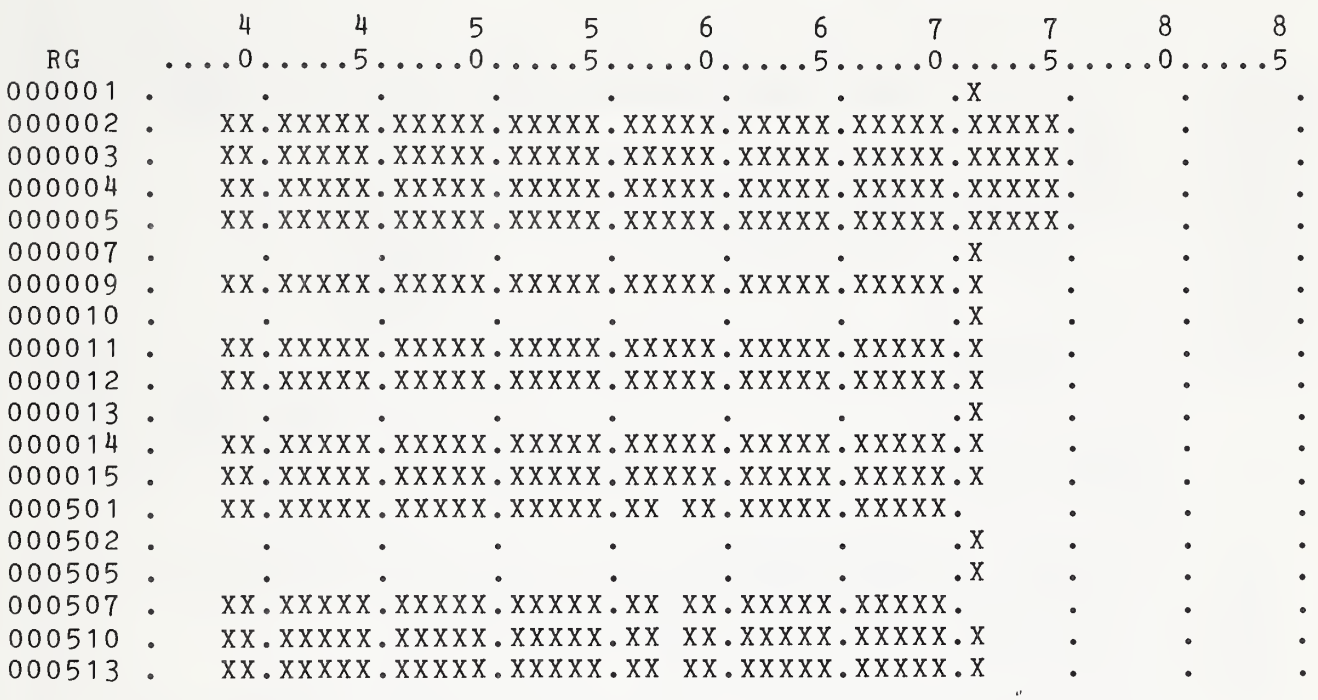
L44 - HASTINGS, NE

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
016 .   XX.XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
017 .   XX.XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
018 .   XX.XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
019 .   XX.XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
020 .   XX.XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
021 .   XX.XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
022 .   XX.XXXXX.XXXXX.XXXXX. XXXX.XXXXX.XX   .     .     .     .
023 .     .XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
024 .     .XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
025 .     .XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
026 .     .XXXXX.XXXXX.XXXX .     . XXXX.XX   .     .     .     .
027 .     .XXXXX.XXXXX.XXXX .     . XXXX.XX   .     .     .     .
028 .     .XXXXX.XXXXX.XXXX .     .     .     .     .     .     .
029 .     .     .     .     .     .  XXX.XX   .     .     .     .
     ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

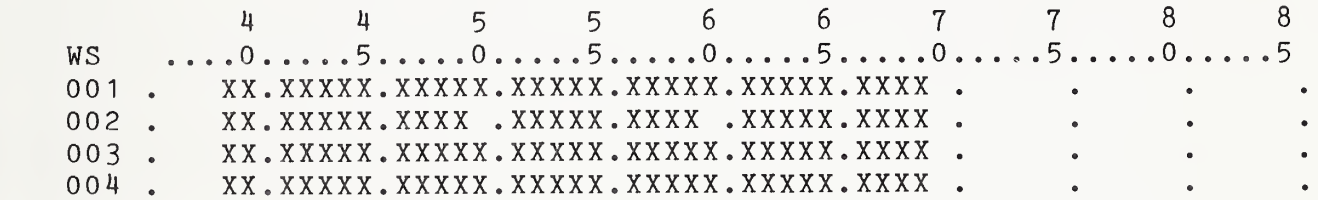
29 WATERSHEDS

607 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L45 - SAFFORD, AZ



19 RAINGAGES 445 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY



4 WATERSHEDS 122 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L47 - ALBUQUERQUE, NM

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .
000002 .   XX.     .     .     .     . XXXX.XXXXX.XX    .     .     .
000003 .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .
000004 .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX XX.XX    .     .     .
000005 .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .
000007 .     .     .     .     .     .     . XXXX.XX    .     .     .
000008 .     .     .     .     .     .     .  XXX.XX    .     .     .
000501 .   XX.     .     .     .     .     .  XXX.XX    .     .     .
000502 .    X.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .     .     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

9 RAINGAGES 194 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001 .   XX.XXXX .XXXXX.XXXXX.XXXXX.XXXXX.XXXX .     .     .     .
002 .   XX.XXXX .XXXXX.XXXXX.XXXXX.XXXXX.XXXX .     .     .     .
003 .   XX.XXXX .XXXXX.XXXXX.XXXX .XXXXX.XXXX .     .     .     .
```

3 WATERSHEDS 89 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L56 - MOSCOW, ID

```
            4     4     5     5     6     6     7     7     8     8
  RG    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 . XXXX.XX   .     .     .     .     .     .     .     .     .
000002 . XXXX.XX   .     .     .     .     .     .     .     .     .
000003 .     .     .     .     .     .     .     .     .XXXX .     .
```

3 RAINGAGES
16 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001 . XXXX.XX   .     .     .     .     .     .     .     .     .
  002 . XXXX.XXXX .     .     .     .     .     .     .     .     .
  003 .     .     .     .     .     .     .     .     .XXXX .     .
  004 .     .     .     .     .     .     .     .     .XXXX .     .
```

4 WATERSHEDS
22 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L61 - MONTICELLO, IL

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .    .     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XX    .
000002 .    .     .   XX.XXXX .     .     .     .     .     .     .
000003 .    .     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XX XX.XXX  .     .
000004 .    .     .   XX.XXXXX.XXXXX.XXXXX. XXXX.XX  X.XXX  .     .
000005 .    .     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.X    .
000006 .    .     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XX  X.XX   .     .
000007 .    .     .     .     .     .    X.XXXXX.XX  X.XXX  .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

7 RAINGAGES 168 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001 .    .     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.X    .
002 .    .     .   XX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.X    .
003 .    .     .    .XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXXX .     .
004 .    .     .   X.XXXXX.XXXXX.XXXXX.XXXXX.XXXXX.XXX  .     .
011 .    .     .     .     .     .     .     .     .    X.X    .
012 .    .     .     .     .     .     .     .     .    X.X    .
021 .    .     .     .     .     .     .     .     .    X.X    .
022 .    .     .     .     .     .     .     .     .     .X    .
031 .    .     .     .     .     .     .     .     .    X.X    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

9 WATERSHEDS 133 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L62 - OXFORD, MS

```
          4    4    5    5    6    6    7    7    8    8
RG   ....0....5....0....5....0....5....0....5....0....5
WC2003 .    .    .    .    .    .    .XXXXX.XX   .    .    .
000001 .    .    .    .    .    .    .    X.XXXX .    .    .
000002 .    .    .    .    .    .    .    X.XXXX .    .    .
000003 .    .    .    .    .    .    .    X.XXXX .    .    .
000004 .    .    .    .    .    .    .    X.XX   .    .    .
000005 .    .    .    .    .    .    .    X.XXXX .    .    .
000006 .    .    .    .    .    .    .    X.XX   .    .    .
000007 .    .    .    .    .    .    .    X.XXXX .    .    .
000008 .    .    .    .    .    .    .    X.XXXX .    .    .
000009 .    .    .    .    .    .    .    X.XX   .    .    .
000010 .    .    .    .    .    .    .    X.XX   .    .    .
000011 .    .    .    .    .    .    .    X.XXXX .    .    .
000012 .    .    .    .    .    .    .    X.XXXX .    .    .
000013 .    .    .    .    .    .    .    X.XXXX .    .    .
000014 .    .    .    .    .    .    .    X.XXXX .    .    .
000015 .    .    .    .    .    .    .    X.XXXX .    .    .
000016 .    .    .    .    .    .    .    X.XX   .    .    .
000017 .    .    .    .    .    .    .    X.XXXX .    .    .
000018 .    .    .    .    .    .    .    X.XXXX .    .    .
000019 .    .    .    .    .    .    .    X.XXXX .    .    .
000020 .    .    .    .    .    .    .    X.XXXX .    .    .
000021 .    .    .    .    .    .    .    X.XXXX .    .    .
000022 .    .    .    .    .    .    .    X.XXXX .    .    .
000023 .    .    .    .    .    .    .    X.XX   .    .    .
000024 .    .    .    .    .    .    .    X.XXXX .    .    .
000025 .    .    .    .    .    .    .    X.XX   .    .    .
000026 .    .    .    .    .    .    .    X.XXXX .    .    .
000027 .    .    .    .    .    .    .    X.XXXX .    .    .
000028 .    .    .    .    .    .    .    X.XX   .    .    .
000029 .    .    .    .    .    .    .    X.XX   .    .    .
000030 .    .    .    .    .    .    .    X.XX   .    .    .
000031 .    .    .    .    .    .    .    X.XXXX .    .    .
000033 .    .    .    .    .    .    .    X.XX   .    .    .
000034 .    .    .    .    .    .    .    X.X    .    .    .
000035 .    .    .    .    .    .    .    X.X    .    .    .
816001 .    .    .    .    .    .    .      .   XX.X .    .    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

36 RAINGAGES

152 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
          4    4    5    5    6    6    7    7    8    8
WS   ....0....5....0....5....0....5....0....5....0....5
001  .    .    .    .    .    .    .   XX.XXXX .    .    .
002  .    .    .    .    .    .    .   XX.XXXX .    .    .
003  .    .    .    .    .    .    .   XX.X    .    .    .
004  .    .    .    .    .    .    .   XX.X    .    .    .
005  .    .    .    .    .    .    .   XX.XXXX .    .    .
007  .    .    .    .    .    .    .   XX.X    .    .    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L62 - OXFORD, MS

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
008  .     .     .     .     .     .     .   XX.X    .     .     .
010  .     .     .     .     .     .     .   XX.XXXX .     .     .
011  .     .     .     .     .     .     .   X .XXXX .     .     .
012  .     .     .     .     .     .     .   XX.X    .     .     .
014  .     .     .     .     .     .   X.XXX X.XX    .     .     .
017  .     .     .     .     .     .     .   XX.X    .     .     .
018  .     .     .     .     .     .     .   XX.X    .     .     .
     ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

13 WATERSHEDS

57 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L63 TOMBSTONE, AZ

```
            4     4     5     5     6     6     7     7     8     8
RG     ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000002 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000003 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000004 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000005 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000006 .     .     .     .     .     .     .  XX .     .     .     .
000007 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000008 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000009 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000010 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000011 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000012 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000013 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000014 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000015 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000016 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000017 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000018 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000019 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000020 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000021 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000022 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000023 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000024 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000025 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000026 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000027 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000028 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000029 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000030 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000031 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000032 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000033 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000034 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000035 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000036 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000037 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000038 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000039 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000040 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000041 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000042 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000043 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000044 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000045 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000046 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000047 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000048 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
000049 .     .     .     .     .     .     .  XXX.XXXXX.     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L63 - TOMBSTONE, AZ

```
                4     4     5     5     6     6     7     7     8     8
RG        ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000050 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000051 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000052 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000053 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000054 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000055 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000056 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000057 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000058 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000059 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000060 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000061 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000062 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000063 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000064 .      .     .     .     .     .     .  XXX.      .     .     .
000065 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000066 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000067 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000068 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000069 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000070 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000071 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000072 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000073 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000074 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000075 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000076 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000077 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000078 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000079 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000080 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000081 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000082 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000083 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000087 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000088 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000089 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000090 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000091 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000092 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000093 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
000094 .      .     .     .     .     .     .    X.XXXXX.     .     .
000096 .      .     .     .     .     .     .    X.XXXXX.     .     .
000361 .      .     .     .     .     .  X.XXXXX.     .     .     .
000384 .      .     .     .     .     .  X.XXXXX.XXXXX.     .     .
000385 .      .     .     .     .     .    XXX.XXXXX.     .     .
000386 .      .     .     .     .     .  X.XXXXX.XXXXX.     .     .
000395 .      .     .     .     .     .     .     .XXXXX.     .     .
000397 .      .     .     .     .     .     .     .    X.     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L63 - TOMBSTONE, AZ

```
          4     4     5     5     6     6     7     7     8     8
RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000512 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000537 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000560 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000587 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000593 .     .     .     .     .     .     .     . XX.     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

103 RAINGAGES 797 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001 .     .     .     .     .     .     . XXX.XXXXX.     .     .
002 .     .     .     .     .     .     . XXX.XXXXX.     .     .
003 .     .     .     .     .     .     . XXX.XXXXX.     .     .
004 .     .     .     .     .     .     . XXX.XXXXX.     .     .
005 .     .     .     .     .     .     . XXX.XXX  .     .     .
006 .     .     .     .     .     .     . XXX.XXXXX.     .     .
007 .     .     .     .     .     .     . XXX.XXXXX.     .     .
008 .     .     .     .     .     .     . XXX.XXXXX.     .     .
009 .     .     .     .     .     .     . XXX.XXXXX.     .     .
010 .     .     .     .     .     .     . XXX.XXXXX.     .     .
011 .     .     .     .     .     .     . XXX.XXXXX.     .     .
015 .     .     .     .     .     .     . XXX.XXXXX.     .     .
101 .     .     .     .     .     . XXXX.XXXXX.XXXXX.X     .     .
102 .     .     .     .     .     .  XXX.XXXXX.XXXXX.X     .     .
103 .     .     .     .     .     .  XXX.XXXXX.XXXXX.X     .     .
104 .     .     .     .     .     .  XXX.XXXXX.XXXXX.X     .     .
105 .     .     .     .     .     .    X.XXXXX.XXXXX.X     .     .
106 .     .     .     .     .     .    X.XXXXX.XXXXX.X     .     .
112 .     .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

19 WATERSHEDS 189 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L64 - SANTA ROSA, NM

RG	4 0	4 5	5 0	5 5	6 0	6 5	7 0	7 5	8 0	8 5
000002	.	.	.	.	.	.	XXX.XXXXX.		.	.
000004	.	.	.	.	.	.	XXX.XXXXX.		.	.
000006	.	.	.	.	.	.	XXX.XXXXX.		.	.
000008	.	.	.	.	.	.	XXX.XXXXX.		.	.
000009	.	.	.	.	.	.	XXX.XXXXX.		.	.
000010	.	.	.	.	.	.	XXX.XXXXX.		.	.
000012	.	.	.	.	.	.	XXX.XXXXX.		.	.
000014	.	.	.	.	.	.	XXX.XXXXX.		.	.
000015	.	.	.	.	.	.	XXX.XXXXX.		.	.
000016	.	.	.	.	.	.	XXX.XXXXX.		.	.
000018	.	.	.	.	.	.	XXX.XXXXX.		.	.
000020	.	.	.	.	.	.	XXX.XXXXX.		.	.
000021	.	.	.	.	.	.	XXX.XXXXX.		.	.
000022	.	.	.	.	.	.	XXX.XXXXX.		.	.
000023	.	.	.	.	.	.	XXX.XXXXX.		.	.
000024	.	.	.	.	.	.	XXX.XXXXX.		.	.
000025	.	.	.	.	.	.	XXX.XXXXX.		.	.
000026	.	.	.	.	.	.	XXX.XXXXX.		.	.
000028	.	.	.	.	.	.	XXX.XXXXX.		.	.
000029	.	.	.	.	.	.	XXX.XXXXX.		.	.
000030	.	.	.	.	.	.	XXX.XXXXX.		.	.
000033	.	.	.	.	.	.	XXX.XXXXX.		.	.
000034	.	.	.	.	.	.	XXX.XXXXX.		.	.
000035	.	.	.	.	.	.	XXX.XXXXX.		.	.
000037	.	.	.	.	.	.	XXX.XXXXX.		.	.
000038	.	.	.	.	.	.	XXX.XXXXX.		.	.
000041	.	.	.	.	.	.	XXX.XXXXX.		.	.
000042	.	.	.	.	.	.	XXX.XXXXX.		.	.
000043	.	.	.	.	.	.	XXX.XXXXX.		.	.
000044	.	.	.	.	.	.	XXX.XXXXX.		.	.
000045	.	.	.	.	.	.	XXX.XXXXX.		.	.
000046	.	.	.	.	.	.	XXX.XXXXX.		.	.
000047	.	.	.	.	.	.	XXX.XXXXX.		.	.
000049	.	.	.	.	.	.	XXX.XXXXX.		.	.
000051	.	.	.	.	.	.	XXX.XXXXX.		.	.
000052	.	.	.	.	.	.	XXX.XXXXX.		.	.
000053	.	.	.	.	.	.	XXX.XXXXX.		.	.
000055	.	.	.	.	.	.	XXX.XXXXX.		.	.
000056	.	.	.	.	.	.	XXX.XXXXX.		.	.
000057	.	.	.	.	.	.	XXX.XXXXX.		.	.
000058	.	.	.	.	.	.	XXX.XXXXX.		.	.
000059	.	.	.	.	.	.	XXX.XXXXX.		.	.
000061	.	.	.	.	.	.	XXX.XXXXX.		.	.
000063	.	.	.	.	.	.	XXX.XXXXX.		.	.
000065	.	.	.	.	.	.	XXX.XXXXX.		.	.
000066	.	.	.	.	.	.	XXX.XXXXX.		.	.
000067	.	.	.	.	.	.	XXX.XXXXX.		.	.
000068	.	.	.	.	.	.	XXX.XXXXX.		.	.
000073	.	.	.	.	.	.	XXX.XXXXX.		.	.

L64 - SANTA ROSA, NM

```
          4     4     5     5     6     6     7     7     8     8
RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000074 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000075 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000076 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000077 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000078 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000079 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000080 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000081 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000082 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000083 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000084 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000088 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000089 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000094 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000099 .     .     .     .     .     .     . XXX.XXXXX.     .     .
000199 .     .     .     .     .     .     .     . XXXX.     .     .
000519 .     .     .     .     .     .     .     . XXXX.     .     .
000525 .     .     .     .     .     .     .     .  XXX.     .     .
000563 .     .     .     .     .     .     .     .  XXX.     .     .
000574 .     .     .     .     .     .     .     .  XXX.     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

69 RAINGAGES

529 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001 .     .     .     .    X.XXXXX.XXXXX.XXXXX.XXXXX.XXX  .     .
```

1 WATERSHEDS

24 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L66 - MOOREFIELD, WV

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
R01P01 .     .     .     .     .  XXX.XXXXX.XX    .     .     .     .
R02P02 .     .     .     .     .     .    X.XX    .     .     .     .
R03P03 .     .     .     .     .  XXX.XXXXX.XX    .     .     .     .
```

3 RAINGAGES — 23 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
 001 .     .     .     .     .  XXX.XXXXX.XX    .     .     .     .
 002 .     .     .     .     .  XXX.XXXXX.XX    .     .     .     .
 004 .     .     .     .     .  XXX.XXXXX.XX    .     .     .     .
 005 .     .     .     .     .  XXX.XXXXX.XX    .     .     .     .
```

4 WATERSHEDS — 40 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L67 - N. DANVILLE, VT

```
          4     4     5     5     6     6     7     7     8     8
RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .    .     .     .     .  XXX.XXXXX.XXXXX.XXXXX.XXXX .     .
000002 .    .     .     .     .  XXX.XXXXX.XXXXX.X    .     .     .
000003 .    .     .     .     .    X.XXXXX.XXXXX.XXXXX.XXX  .     .
000004 .    .     .     .     .    X.XXXXX.XXXXX.XXXXX.     .     .
000005 .    .     .     .     .    X.XXXXX.XXXXX.XXXXX.     .     .
000006 .    .     .     .     .     .XXXXX.XXXXX.XXX  .     .     .
000007 .    .     .     .     .  XXX.XXXX .     .     .     .     .
000008 .    .     .     .     .    X.XXXXX.XXXXX.XXX  .     .     .
000010 .    .     .     .     .  XXX.XXXXX.XXXXX.XXXXX.     .     .
000011 .    .     .     .     .  XXX.XXXXX.XXXXX.XXXXX.XXXX .     .
000012 .    .     .     .     .  XXX.XXXXX.XXXXX.XXXXX.XXXX .     .
000015 .    .     .     .     .  XXX.XXXXX.XXXXX.XXXX .     .     .
000016 .    .     .     .     .  XXX.XXX  .     .     . XXX .     .
000018 .    .     .     .     .  X X.XXX  .     .     .     .     .
000019 .    .     .     .     .  XXX.XXXXX.XXXXX.X    .     .     .
000020 .    .     .     .     .    X.XXXXX.XXXXX.X    .     .     .
000021 .    .     .     .     .    X.XXXXX.XXXXX.X    .     .     .
000022 .    .     .     .     .     .XXXXX.XXXXX.X    .     .     .
000024 .    .     .     .     .   XX.XXXXX.XXX  .     .     .     .
000025 .    .     .     .     .     .     . XXXX.X   X.XXX  .     .
000029 .    .     .     .     .     .     .  XXX.XXXXX.XXX  .     .
00006A .    .     .     .     .     .     .     .  XXX.     .     .
00020A .    .     .     .     .     .XXXXX.XXX  .     .     .     .
00022A .    .     .     .     .  XXX.XX XX.XXX  .     .     .     .
00023A .    .     .     .     .     .XXXXX.XXXXX.X    .     .     .
00024A .    .     .     .     .     .     .XXXXX.X    .     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

26 RAINGAGES 331 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001    .    .     .     .     .  XXX.XXXXX.XXXXX.XXX  .     .     .
002    .    .     .     .     .     .XXXXX.XXXXX.X    .     .     .
003    .    .     .     .     .    X.XXXXX.XXXXX.XXX X.XXXX .     .
004    .    .     .     .     .    X.XXXXX.XXXXX.XXX  .     .     .
005    .    .     .     .     .    X.XXXXX.XXXXX.XXX  .     .     .
006    .    .     .     .     .     .     .  XXX.X    .     .     .
007    .    .     .     .     .     .XXXXX.XXXXX.XX   .     .     .
008    .    .     .     .     .     .XXXXX.XXXXX.XXXXX.XX X .     .
009    .    .     .     .     .     .XXXXX.XXXXX.XXX  .     .     .
010    .    .     .     .     .     .  XXX.XXXXX.XXX  .     .     .
011    .    .     .     .     .     .   XX.XXXXX. X   .     .     .
012    .    .     .     .     .     .   XX.XXXXX.XX   .     .     .
013    .    .     .     .     .     .    X.XXXXX.XX   .     .     .
014    .    .     .     .     .     .    X. XXXX.XX   .     .     .
016    .    .     .     .     .     .    X.XX   .     .     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

15 WATERSHEDS 167 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAIL

L68 - REYNOLDS, ID

```
          4     4     5     5     6     6     7     7     8     8
RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
012X29 .     .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
012429 .     .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
012529 .     .     .     .     .     .     . XXX.XXXXX.     .     .
015X87 .     .     .     .     .     .     . XXX.XXX  .     .     .
015X95 .     .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
015487 .     .     .     .     .     .     . XXX.XXX  .     .     .
015495 .     .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
015587 .     .     .     .     .     .     . XXX.XXX  .     .     .
015595 .     .     .     .     .     .     . XXX.XXXXX.     .     .
022X88 .     .     .     .     .     .     . XXX.XXX  .     .     .
022488 .     .     .     .     .     .     . XXX.XXX  .     .     .
022588 .     .     .     .     .     .     . XXX.XXX  .     .     .
023X01 .     .     .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.X    .
023401 .     .     .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.X    .
023501 .     .     .     .     .     .     . XXX.XXXXX.XXXXX.X    .
024X76 .     .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
024476 .     .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
024576 .     .     .     .     .     .     . XXX.XXXXX.     .     .
028X18 .     .     .     .     .     .     . XXX.XXX  .     .     .
028418 .     .     .     .     .     .     . XXX.XXX  .     .     .
028518 .     .     .     .     .     .     . XXX.XXX  .     .     .
031X48 .     .     .     .     .     .     . XXX.XXXXX.     .     .
031448 .     .     .     .     .     .     . XXX.XXXXX.     .     .
031548 .     .     .     .     .     .     . XXX.XXXXX.     .     .
033X58 .     .     .     .     .     .     . XXX.XXX  .     .     .
033X76 .     .     .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .
033458 .     .     .     .     .     .     . XXX.XXX  .     .     .
033476 .     .     .     .     .     . XXXX.XXXXX.XXXXX.XX   .     .
033558 .     .     .     .     .     .     . XXX.XXX  .     .     .
033576 .     .     .     .     .     .     . XXX.XXXXX.XX   .     .
035X01 .     .     .     .     .     .     . XXX.XX   .     .     .
035401 .     .     .     .     .     .     . XXX.XX   .     .     .
035501 .     .     .     .     .     .     . XXX.XX   .     .     .
043X41 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
043441 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
043541 .     .     .     .     .     .     . XXX.XXXXX.     .     .
045X04 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
045404 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
045504 .     .     .     .     .     .     . XXX.XXXXX.     .     .
047X52 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
047452 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
047552 .     .     .     .     .     .     . XXX.XXXXX.     .     .
049X61 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
049461 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
049561 .     .     .     .     .     .     . XXX.XXXXX.     .     .
053X93 .     .     .     .     .     .     . XXX.XXXXX.XXXXX.X    .
053493 .     .     .     .     .     .     . XXX.XXXXX.XXXXX.X    .
053593 .     .     .     .     .     .     . XXX.XXXXX.XXXXX.X    .
054X23 .     .     .     .     .     .   X.XXXXX.XXXXX.     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L68 - REYNOLDS, ID

```
          4     4     5     5     6     6     7     7     8     8
RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
054423 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
054523 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
055X88 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
055488 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
055588 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
057X96 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
057496 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
057596 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
059X71 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
059471 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
059571 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
061X25 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
061425 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
061525 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
072X67 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
072467 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
072567 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
074X12 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
074412 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
074512 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
075X89 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
075489 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
075589 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
076X59 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
076459 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
076559 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
078X14 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
078414 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
078514 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
079X47 .    .     .     .     .     .     .  XX . X   .     .     .
079447 .    .     .     .     .     .     .  XX . X   .     .     .
079547 .    .     .     .     .     .     .  XX . X   .     .     .
083X82 .    .     .     .     .     .    X.XX   .     .     .     .
083X92 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
083482 .    .     .     .     .     .    X.XX   .     .     .     .
083492 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
083592 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
086X52 .    .     .     .     .     .     .     .X    .     .     .
086452 .    .     .     .     .     .     .     .X    .     .     .
086552 .    .     .     .     .     .     .     .X    .     .     .
088X65 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
088465 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
088565 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
095X10 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
095410 .    .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
095510 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
097X00 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
097400 .    .     .     .     .     .    X.XXXXX.XXXXX.     .     .
097500 .    .     .     .     .     .     .  XXX.XXXXX.     .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
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L68 - REYNOLDS, ID

```
                4     4     5     5     6     6     7     7     8     8
RG        ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
098X97 .      .     .     .     .     .     .     . XX  .     .     .
098497 .      .     .     .     .     .     .     . XX  .     .     .
098597 .      .     .     .     .     .     .     . XX  .     .     .
106X36 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
106436 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
106536 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
108X04 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
108404 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
108504 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
114X19 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
114419 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
114519 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
116X91 .      .     .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.X    .
116491 .      .     .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.X    .
116591 .      .     .     .     .     .     .  XXX.XXXXX.XXXXX.X    .
119X03 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
119403 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
119503 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
124X84 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
124484 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
124584 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
126X97 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
126497 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
126597 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
127X07 .      .     .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.X    .
127407 .      .     .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.X    .
127507 .      .     .     .     .     .     .  XXX.XXXXX.XXXXX.X    .
128X87 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
128487 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
128587 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
135X19 .      .     .     .     .     .     .     . XX  .     .     .
135419 .      .     .     .     .     .     .     . XX  .     .     .
135519 .      .     .     .     .     .     .     . XX  .     .     .
138X31 .      .     .     .     .     .     .     .XXXXX.     .     .
138431 .      .     .     .     .     .     .     .XXXXX.     .     .
138531 .      .     .     .     .     .     .     .XXXXX.     .     .
144X62 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
144462 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
144562 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
145X37 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
145437 .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
145537 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
147X35 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
147435 .      .     .     .     .     . XXXX.XXXXX.XXXXX.     .     .
147535 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
154X64 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
154464 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
154564 .      .     .     .     .     .     .  XXX.XXXXX.     .     .
155X07 .      .     .     .     .     . XXXX.XXXXX.XXXXX.XXXXX.X    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
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L68 - REYNOLDS, ID

```
                4     4     5     5     6     6     7     7     8     8
RG         ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
155X94  .      .     .     .     .     .     .  XX .     .     .     .
155407  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.XXXXX.X    .
155494  .      .     .     .     .     .     .  XX .     .     .     .
155507  .      .     .     .     .     .     .  XXX.XXXXX.XXXXX.X    .
155594  .      .     .     .     .     .     .  XX .     .     .     .
156X68  .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
156468  .      .     .     .     .     .    X.XXXXX.XXXXX.     .     .
156568  .      .     .     .     .     .     .  XXX.XXXXX.     .     .
163X20  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.     .     .
163X35  .      .     .     .     .     .     .    X.XXXXX.     .     .
163420  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.     .     .
163435  .      .     .     .     .     .     .    X.XXXXX.     .     .
163520  .      .     .     .     .     .     .  XXX.XXXXX.     .     .
163535  .      .     .     .     .     .     .    X.XXXXX.     .     .
165X02  .      .     .     .     .     .     .   XX.XXXXX.     .     .
165402  .      .     .     .     .     .     .   XX.XXXXX.     .     .
165502  .      .     .     .     .     .     .   XX.XXXXX.     .     .
166X94  .      .     .     .     .     .     .  XXX.XXXXX.     .     .
166494  .      .     .     .     .     .     .  XXX.XXXXX.     .     .
166594  .      .     .     .     .     .     .  XXX.XXXXX.     .     .
167X07  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.     .     .
167407  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.     .     .
167507  .      .     .     .     .     .     .  XXX.XXXXX.     .     .
174X17  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.     .     .
174417  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.     .     .
174517  .      .     .     .     .     .     .  XXX.XXXXX.     .     .
176X07  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.XXXXX.X    .
176X14  .      .     .     .     .     .     .     .XXXXX.     .     .
176407  .      .     .     .     .     .  XXXX.XXXXX.XXXXX.XXXXX.X    .
176414  .      .     .     .     .     .     .     .XXXXX.     .     .
176507  .      .     .     .     .     .     .  XXX.XXXXX.XXXXX.X    .
176514  .      .     .     .     .     .     .     .XXXXX.     .     .
        ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

179 RAINGAGES 1,740 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
                4     4     5     5     6     6     7     7     8     8
WS         ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001     .      .     .     .     .     .  XXX.XXXXX.XXXXX.XXXXX.X    .
002     .      .     .     .     .     .   XX.XXXXX.XXXXX.XXXXX.X    .
003     .      .     .     .     .     .    X.XXXXX.XXXXX.XXXXX.X    .
004     .      .     .     .     .     .     .XXXXX.XXXXX.XXXXX.X    .
011     .      .     .     .     .     .     . XXXX.XXXXX.XX   .     .
012     .      .     .     .     .     .     . XXX . XX X.     .     .
013     .      .     .     .     .     .  X X.XXXXX.XXXXX.     .     .
014     .      .     .     .     .     .     . XXXX.XXXXX.X XXX.X    .
015     .      .     .     .     .     .    X.XXXXX.XXXXX.XXXXX.X    .
016     .      .     .     .     .     .     .     .  XXX.     .     .
        ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
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L68 - REYNOLDS, ID

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
021 .     .     .     .     .     .     .    X.XXXXX.     .     .
022 .     .     .     .     .     .     .    X.XXXXX.     .     .
033 .     .     .     .     .     .     . XXX.XXX  .     .     .
034 .     .     .     .     .     .     . XXX.XXX  .     .     .
     ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

14 WATERSHEDS

157 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L69 - CHICKASHA, OK

```
                4    4    5    5    6    6    7    7    8    8
RG       ....0....5....0....5....0....5....0....5....0....5
000001 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000002 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000003 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000004 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000005 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000006 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000007 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000008 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000009 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000010 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000011 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000012 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000013 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000014 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000015 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000016 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000017 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000018 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000019 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000020 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000021 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000022 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000023 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000024 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000025 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000026 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000027 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000028 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000029 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000030 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000031 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000032 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000033 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000034 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000035 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000036 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000037 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000038 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000039 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000040 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000041 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000042 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000043 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000044 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000045 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000046 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000047 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000048 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000049 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L69 - CHICKASHA, OK

RG	40	45	50	55	60	65	70	75	80	85
000050	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000051	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000052	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000053	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000054	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000055	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000056	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000057	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000058	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000059	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000060	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000061	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000062	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000063	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000064	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000065	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000066	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000067	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000068	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000069	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000070	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000071	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000072	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000073	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000074	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000075	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000076	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000077	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000078	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000079	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000080	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000081	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000082	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000083	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000084	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000085	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000086	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000087	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000088	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000089	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000090	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000091	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000092	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000093	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000094	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000095	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000096	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000097	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		
000098	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD	.	.		

L69 - CHICKASHA, OK

RG	40	45	50	55	60	65	70	75	80	85
000099	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000100	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000101	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000102	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000103	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000104	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000105	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000106	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000107	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000108	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000109	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000110	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000111	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000112	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000113	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000114	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000115	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000116	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000117	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000118	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000119	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000120	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000121	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000122	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000123	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000124	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000125	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000126	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000127	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000128	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000129	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000130	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000131	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000132	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000133	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000134	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000135	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000136	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000137	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000138	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000139	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000140	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000141	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000142	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000143	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000144	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000145	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000146	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.
000147	.	.	.	.	.	.DDDDD.DDDDD.DDDDD.DD			.	.

L69 - CHICKASHA, OK

```
                4    4    5    5    6    6    7    7    8    8
RG         ....0....5....0....5....0....5....0....5....0....5
000148 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000149 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000150 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000151 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000152 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000153 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000154 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000155 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000156 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000157 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000158 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000159 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000160 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000161 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000162 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000163 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000164 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000165 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000166 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000167 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000168 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000169 .    .    .    .    .    . DDDD.DDDDD.DDDDD.      .    .
000170 .    .    .    .    .    . DDDD.DDDDD.DDDDD.      .    .
000171 .    .    .    .    .    . DDDD.DDDDD.DDDDD.      .    .
000172 .    .    .    .    .    . DDDD.DDDDD.DDDDD.      .    .
000173 .    .    .    .    .    .DD DD.DDDDD.DDDDD.DD    .    .
000174 .    .    .    .    .    . D DD.DDDDD.DDDD .      .    .
000175 .    .    .    .    .    .DDDDD.DDDDD.DDDD .      .    .
000176 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000177 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000178 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000179 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000180 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000181 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000182 .    .    .    .    .    .DDDDD.DDDDD.DDDDD.DD    .    .
000183 .    .    .    .    .    .  DDD.DDDDD.DDDDD.DD    .    .
000184 .    .    .    .    .    .  DDD.DDDDD.DDDDD.DD    .    .
000185 .    .    .    .    .    .    D.DDDDD.DDDDD.DD    .    .
000186 .    .    .    .    .    .      .DDDDD.DDDDD.DD    .    .
000187 .    .    .    .    .    .      .XXXXX.XXXXX.DD    .    .
000188 .    .    .    .    .    .      .DDDDD.DDDDD.DD    .    .
000189 .    .    .    .    .    .      .DDDDD.DDDD .      .    .
000190 .    .    .    .    .    .      .DDDDD.DDDD .      .    .
000191 .    .    .    .    .    .      .DDDDD.DDDD .      .    .
000192 .    .    .    .    .    .      .DDDDD.DDDD .      .    .
000193 .    .    .    .    .    .      .DDDDD.DDDDD.DD    .    .
000194 .    .    .    .    .    .      .DDDDD.DDDDD.DD    .    .
000195 .    .    .    .    .    .      .XXXXX.XXXXX.DD    .    .
000196 .    .    .    .    .    .      .DDDDD.DDDDD.DD    .    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L69 - CHICKASHA, OK

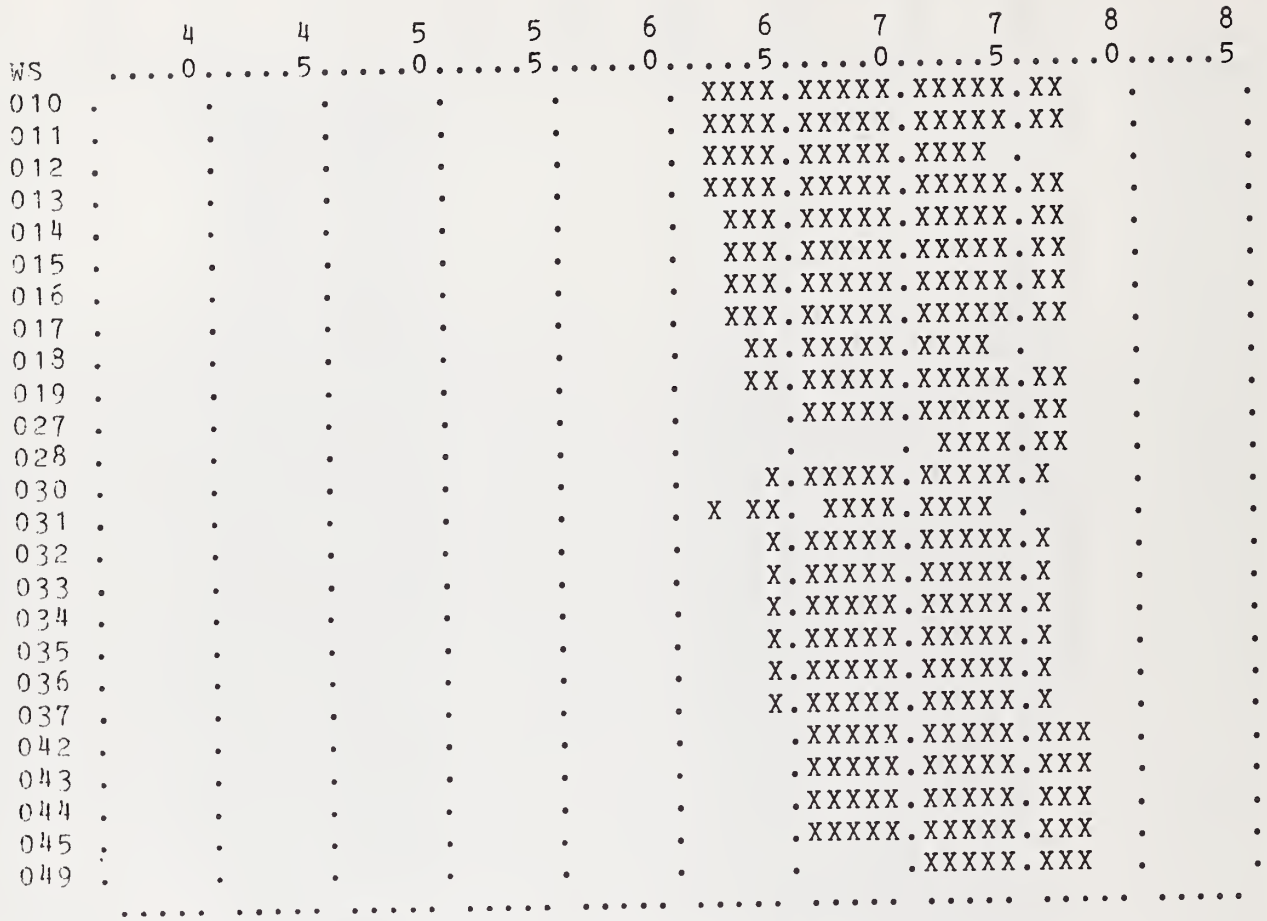
```
            4     4     5     5     6     6     7     7     8     8
RG       ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000197 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000198 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000199 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000200 .     .     .     .     .     .     .DDDDD.DDDDD.      .     .
000201 .     .     .     .     .     .     .DDDDD.DDDDD.      .     .
000202 .     .     .     .     .     .     .DDDDD.DDDDD.      .     .
000203 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000204 .     .     .     .     .     .     .DDDDD.DDDDD.      .     .
000205 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000206 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000207 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000208 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000209 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000210 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000211 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000212 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000213 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000214 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000215 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000216 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000217 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000218 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000219 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000220 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000221 .     .     .     .     .     .     .DDDDD.DDDDD.DD    .     .
000222 .     .     .     .     .     .     .DDDDD.DDDDD.      .     .
000223 .     .     .     .     .     .     .  DDD.DDDD .      .     .
000224 .     .     .     .     .     .     .  DDD.DDDD .      .     .
000225 .     .     .     .     .     .     .  DDD.DDDD .      .     .
000226 .     .     .     .     .     .     .  DDD.DDDD .      .     .
000227 .     .     .     .     .     .     .  DDD.DDDD .      .     .
000228 .     .     .     .     .     .     .  DDD.DDDD .      .     .
000229 .     .     .     .     .     .     .      .  D  .      .     .
000230 .     .     .     .     .     .     .      .  DDD.DD    .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

230 RAINGAGES

20 STATION YEARS - BREAKPOINT
3,586 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
WS       ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001    .     .     .     .     .     .XXXXX.XXXXX.XXXXX.XX    .     .
002    .     .     .     .     .     .XXXXX.XXXXX.XXXX .      .     .
004    .     .     .     .     .     .XXXXX.X     .    .      .     .
005    .     .     .     .     .     .   XX.XXXXX.XXXXX.XX    .     .
006    .     .     .     .     .     .   XX.XXXXX.      .      .     .
007    .     .     .     .     .     .XXXXX.XXXXX.XXXXX.XX    .     .
008    .     .     .     .     .     .XXXXX.XXXXX.XXXX .      .     .
009    .     .     .     .     .     .XXXXX.XXXXX.XXXX .      .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L69 - CHICKASHA, OK



33 WATERSHEDS

422 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L70 - SONORA, TX

```
          4    4    5    5    6    6    7    7    8    8
RG   ....0....5....0....5....0....5....0....5....0....5
000001 .    .    .    .    .    .    . XXX.XX   .    .    .
000002 .    .    .    .    .    .    . XXX.XX   .    .    .
000004 .    .    .    .    .    .    . XXX.XX   .    .    .
000005 .    .    .    .    .    .    . XXX.XX   .    .    .
000006 .    .    .    .    .    .    . XXX.XX   .    .    .
000007 .    .    .    .    .    .    . XXX.XX   .    .    .
000008 .    .    .    .    .    .    . XXX.XX   .    .    .
000009 .    .    .    .    .    .    . XXX.XX   .    .    .
00001A .    .    .    .    .    .    . XXX.XX   .    .    .
000010 .    .    .    .    .    .    . XXX.XX   .    .    .
000011 .    .    .    .    .    .    . XXX.XX   .    .    .
000012 .    .    .    .    .    .    . XXX.XX   .    .    .
000013 .    .    .    .    .    .    . XXX.XX   .    .    .
000015 .    .    .    .    .    .    . XXX.XX   .    .    .
000016 .    .    .    .    .    .    . XXX.XX   .    .    .
000017 .    .    .    .    .    .    . XXX.XX   .    .    .
000018 .    .    .    .    .    .    . XXX.XX   .    .    .
000019 .    .    .    .    .    .    . XXX.XX   .    .    .
000020 .    .    .    .    .    .    . XXX.XX   .    .    .
00003A .    .    .    .    .    .    . XXX.XX   .    .    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

20 RAINGAGES — 100 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
          4    4    5    5    6    6    7    7    8    8
WS   ....0....5....0....5....0....5....0....5....0....5
001  .    .    .    .    .    .    . XX .XX   .    .    .
002  .    .    .    .    .    .    . XXX.XX   .    .    .
003  .    .    .    .    .    .    . XX .XX   .    .    .
004  .    .    .    .    .    .    . XXX.XX   .    .    .
005  .    .    .    .    .    .    . XXX.X    .    .    .
006  .    .    .    .    .    .    . XXX.XX   .    .    .
007  .    .    .    .    .    .    . XX .XX   .    .    .
008  .    .    .    .    .    .    . XX .XX   .    .    .
009  .    .    .    .    .    .    . XX .XX   .    .    .
010  .    .    .    .    .    .    . XX .XX   .    .    .
011  .    .    .    .    .    .    . XX .XX   .    .    .
012  .    .    .    .    .    .    . XX .XX   .    .    .
013  .    .    .    .    .    .    . XX .XX   .    .    .
014  .    .    .    .    .    .    .    . X   .    .    .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

14 WATERSHEDS — 56 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L71 - TREYNOR, IA

```
          4     4     5     5     6     6     7     7     8     8
RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000101 .    .     .     .     .     .  XXX.XXXXX.XXX  .     .     .
000105 .    .     .     .     .     .  XXX.XXXXX.XXX  .     .     .
000111 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
000112 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
000113 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
000115 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
000116 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
000117 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

8 RAINGAGES — 112 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
          4     4     5     5     6     6     7     7     8     8
WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
002 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
003 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
004 .    .     .     .     .     .   XX.XXXXX.XXXXX.XXX  .     .
005 .    .     .     .     .     .  XXX.XXXXX.XXX  .     .     .
```

5 WATERSHEDS — 71 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L72 - COTTONWOOD, SD

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
0000H2 .     .     .     .     .     .     . DDD.DD  .     .     .
0000L2 .     .     .     .     .     .     . DDD.DD  .     .     .
0000M1 .     .     .     .     .     .     . DDD.DD  .     .     .
```

3 RAINGAGES
0 STATION YEARS - BREAKPOINT
15 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001  .     .     .     .     .     .     . XXX.XX  .     .     .
  002  .     .     .     .     .     .     . XXX.XX  .     .     .
  005  .     .     .     .     .     .     . XX .XX  .     .     .
```

3 WATERSHEDS
14 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L73 - FORT STAUNTON, NM

```
            4     4     5     5     6     6     7     7     8     8
RG     ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .     .     .     .XXXXX.XXXXX.X    .     .
000002 .     .     .     .     .     .     .XXXXX.XXXXX.X    .     .
```

2 RAINGAGES
22 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
WS     ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
001    .     .     .     .     .     .     . X   X.XXXXX.X    .     .
002    .     .     .     .     .     .     . X   X.XX  X.X    .     .
```

2 WATERSHEDS
14 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L74 - TIFTON, GA

```
            4     4     5     5     6     6     7     7     8     8
 RG    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .     .     .     .  XXX.XXXXX.XXX  .     .
000002 .     .     .     .     .     .     .  XXX.XXXXX.XXX  .     .
000003 .     .     .     .     .     .     .  XXX.XXXXX.XXX  .     .
000004 .     .     .     .     .     .     .  XX  .     .     .     .
000005 .     .     .     .     .     .     .  XX  .     .     .     .
000006 .     .     .     .     .     .     .  XXX.X    .     .     .
000007 .     .     .     .     .     .     .  XX  .     .     .     .
000008 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000009 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000010 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000011 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000012 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000013 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000014 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000015 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000016 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000017 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000018 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000019 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000020 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000021 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000022 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000023 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000024 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000025 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000026 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000027 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000028 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000029 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000030 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000031 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000032 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000033 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000034 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000035 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000036 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000037 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000038 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000039 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000040 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000041 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000042 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000043 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000044 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000045 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000046 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000047 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000048 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000049 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

L74 - TIFTON, GA

```
                4     4     5     5     6     6     7     7     8     8
RG       ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000050 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000051 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000052 .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
000053 .     .     .     .     .     .     .   XX.XXXXX.XXXXX.     .
000054 .     .     .     .     .     .     .   XX.XXXXX.XXXXX.     .
000055 .     .     .     .     .     .     .   XX.XXXXX.XXXXX.     .
000056 .     .     .     .     .     .     .   XX.XXXXX.XXXXX.     .
000057 .     .     .     .     .     .     .   XX.XXXXX.XXXXX.     .
000058 .     .     .     .     .     .     .   XX.XXXXX.XXXXX.     .
000059 .     .     .     .     .     .     .     .XXXXX.XXXXX.     .
000060 .     .     .     .     .     .     .     .     .  XXX.     .
000061 .     .     .     .     .     .     .     .     .  XXX.     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

61 RAINGAGES

716 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
                4     4     5     5     6     6     7     7     8     8
WS       ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
002    .     .     .     .     .     .     .     .XXXXX.XXXXX.     .
003    .     .     .     .     .     .     .     X.XXXXX.XXXXX.     .
004    .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
005    .     .     .     .     .     .     .   XX.XXXXX.XXXXX.     .
006    .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
007    .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
008    .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
009    .     .     .     .     .     .     .  XXX.XXXXX.XXXXX.     .
       ..... ..... ..... ..... ..... ..... ..... ..... ..... .....
```

8 WATERSHEDS

98 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

L75 - AHOSKIE, NC

```
            4     4     5     5     6     6     7     7     8     8
  RG    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
WTD001 .     .     .     .     .     .     .  DDD.DD  .     .     .
WTD002 .     .     .     .     .     .     .  DDD.DD  .     .     .
WTD003 .     .     .     .     .     .     .  DDD.DD  .     .     .
WTD004 .     .     .     .     .     .     .  DDD.DD  .     .     .
```

4 RAINGAGES
0 STATION YEARS - BREAKPOINT
20 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS    ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
 001 .     .     .     .     .     .     .  DDD.DD  .     .     .
 002 .     .     .     .     .     .     .  DDD.DD  .     .     .
 003 .     .     .     .     .     .     .  DDD.DD  .     .     .
 004 .     .     .     .     .     .     .  DDD.DD  .     .     .
```

4 WATERSHEDS
0 STATION YEARS - BREAKPOINT
20 STATION YEARS - DAILY

L77 - HAWAII

```
            4     4     5     5     6     6     7     7     8     8
  RG   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
000001 .     .     .     .     .     .     .     . XXXX.XXX  .     .
000003 .     .     .     .     .     .     .     . XXXX.XX   .     .
000006 .     .     .     .     .     .     .     .    X.XX   .     .
```

3 RAINGAGES
16 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

```
            4     4     5     5     6     6     7     7     8     8
  WS   ....0.....5.....0.....5.....0.....5.....0.....5.....0.....5
  001 .     .     .     .     .     .     .     . XXX .XXX  .     .
  003 .     .     .     .     .     .     .     . XXXX.XX   .     .
  006 .     .     .     .     .     .     .     .    X.XX   .     .
```

3 WATERSHEDS
15 STATION YEARS - BREAKPOINT
0 STATION YEARS - DAILY

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